

=> fil casreact

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FILE CONTENT:1840 - 24 Apr 2005 VOL 142 ISS 17

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This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d his

(FILE 'HOME' ENTERED AT 11:48:43 ON 25 APR 2005)  
SET COST OFF

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E LI/MF

L1 30 S E3

FILE 'CASREACT' ENTERED AT 11:49:00 ON 25 APR 2005  
ACT ZINNA677/A

L2 STR

L3 5208 SEA FILE=CASREACT SSS FUL L2 ( 62854 REACTIONS)

ACT ZINNA677A/A

L4 STR

L5 STR

L6 ( 5208)SEA FILE=CASREACT SSS FUL L4 ( 62854 REACTIONS)

L7 2389 SEA FILE=CASREACT SUB=L6 SSS FUL L5 ( 24843 REACTIONS)

L8 32 S L1 AND L7

L9 22 S L8 AND (PY<=2001 OR PRY<=2001 OR AY<=2001)

L10 1 S L8 AND (MEUDT ? OR ERBES ? OR FORSTINGER ?)/AU

L11 1 S L8 AND CLARIANT?/PA,CS

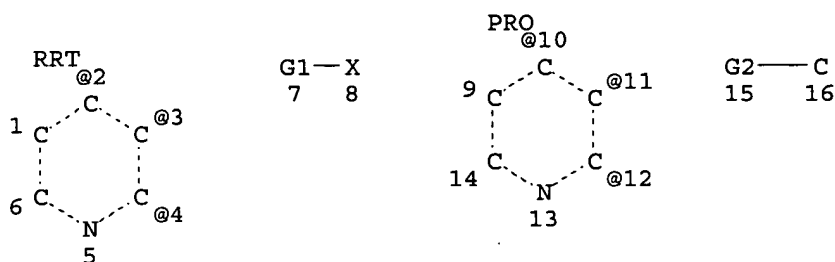
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L13 22 S L9-L11

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=> d sta que 17

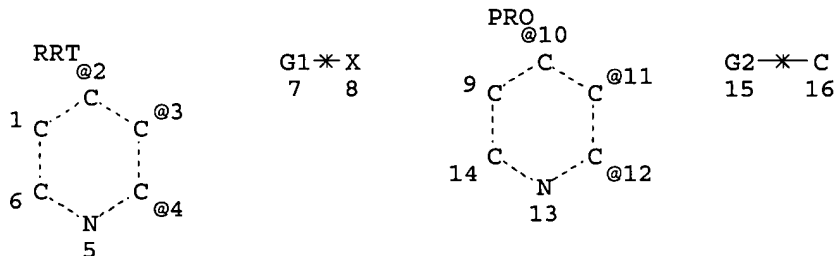
L4 STR



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 VAR G2=10/11/12  
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 DEFAULT MLEVEL IS ATOM  
 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:  
 RING(S) ARE ISOLATED OR EMBEDDED  
 NUMBER OF NODES IS 16

STEREO ATTRIBUTES: NONE  
 L5 STR



VAR G1=2/3/4  
 VAR G2=10/11/12  
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 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:  
 RING(S) ARE ISOLATED OR EMBEDDED  
 NUMBER OF NODES IS 16

STEREO ATTRIBUTES: NONE

L6 ( 5208)SEA FILE=CASREACT SSS FUL L4 ( 62854 REACTIONS)  
 L7 2389 SEA FILE=CASREACT SUB=L6 SSS FUL L5 ( 24843 REACTIONS)

100.0% DONE 62854 VERIFIED 24843 HIT RXNS 2389 DOCS  
 SEARCH TIME: 00.00.03

=> d l12 bib retable

L12 ANSWER 1 OF 10 CASREACT COPYRIGHT 2005 ACS on STN  
 AN 141:260503 CASREACT  
 TI "Acetylene Zipper" Reactions and Pd-Cu-Catalyzed Cross-coupling in the  
 Synthesis of Vicinal 1,3-Alkadiynylarylamines and Aminopyridines

AU Balova, I. A.; Morozkina, S. N.; Sorokoumov, V. N.; Vinogradova, O. V.;  
Vasilevskii, S. F.  
CS St. Petersburg State University, St. Petersburg, 198504, Russia  
SO Russian Journal of Organic Chemistry (Translation of Zhurnal Organicheskoi  
Khimii) (2003), 39(11), 1613-1617  
CODEN: RJOCEQ; ISSN: 1070-4280  
PB MAIK Nauka/Interperiodica Publishing  
DT Journal  
LA English  
RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Balova, I	2003	44	107	Tetrahedron Lett	CAPLUS
Balova, I	1988	26	626	Zh Org Khim	
Balova, I	1986	22	2459	ZhOrKh	
Boese, R	1992	31	1643	Angew, Chem Int Ed E	
Brown, C	1975	97	891	J Am Chem Soc	CAPLUS
Bryuster, R	1990	2	271	SOP	
Castro, C	1963	28	2163	J Org Chem	CAPLUS
Chattaway, F	1914		124	J Chem Soc	
Favorskii, A	1886	18	319	Zh Russian Khim Obsh	
Hey, A	1962	27	3320	J Org Chem	
Katritzky, A	1997		715	J Org Chem	CAPLUS
Liao, H	1995	60	3711	J Org Chem	CAPLUS
Michel, A	1878	11	108	Ber	
Okada, S	1994	67	455	Bull Chem Soc Jpn	CAPLUS
Richter	1883	16	677	Ber	
Shvartsberg, M	1980	7	1690	Izv Akad Nauk SSSR,	
Shvartsberg, M	1982	11	2524	Izv Akad Nauk SSSR,	
Sonogashira, K	1975		4467	Tetrahedron Lett	CAPLUS
Spence, J	1996	61	4014	J Org Chem	CAPLUS
Tarasova, O	1993	6	571	Synthesis	
Tarasova, O	1996	8	1208	Zh Org Khim	
Vasilevskii, S	1990	9	2089	Izv Akad Nauk SSSR,	
Vasilevsky, S	1995		775	Lieb Ann Chem	CAPLUS

=> d 112 bib retable 2-10

L12 ANSWER 2 OF 10 CASREACT COPYRIGHT 2005 ACS on STN  
AN 139:214146 CASREACT  
TI Cross-Coupling Reactions of (1-Fluorovinyl)methyldiphenylsilane with Aryl  
Halides and Aryl Triflates  
AU Hanamoto, Takeshi; Kobayashi, Tomoko  
CS Department of Chemistry and Applied Chemistry, Saga University, Saga,  
840-8502, Japan  
SO Journal of Organic Chemistry (2003), 68(16), 6354-6359  
CODEN: JOCEAH; ISSN: 0022-3263  
PB American Chemical Society  
DT Journal  
LA English  
RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Allmendinger, T	1990	31	7297	Tetrahedron Lett	CAPLUS
Casado, A	2000	122	11771	J Am Chem Soc	CAPLUS
Chen, C	1999	64	3476	J Org Chem	CAPLUS
Chen, C	1997	38	7677	Tetrahedron Lett	CAPLUS
Echavarren, A	1987	109	5478	J Am Chem Soc	CAPLUS
Echavarren, A	1988	110	1557	J Am Chem Soc	CAPLUS

Farina, V	1991	113	9585	J Am Chem Soc	CAPLUS
Fujiwara, M	1999	40	7261	Tetrahedron Lett	CAPLUS
Gharat, L	1996	43	185	Heterocycles	
Hanamoto, T	2002	75	2497	Bull Chem Soc Jpn	CAPLUS
Hanamoto, T	1999		151	Chem Commun	CAPLUS
Hanamoto, T	1999		2397	Chem Commun	CAPLUS
Hanamoto, T	2000		107	J Chem Soc, Perkin T	
Hanamoto, T	2002	118	99	J Fluorine Chem	CAPLUS
Hanamoto, T	2001		1320	Synlett	CAPLUS
Hanamoto, T	2001		281	Synlett	CAPLUS
Ichikawa, J	1996	37	8799	Tetrahedron Lett	CAPLUS
Jeong, I	2000	41	8917	Tetrahedron Lett	CAPLUS
Know, H	1990	55	3114	J Org Chem	
Kuhhar', V	1995			Fluorine-containing	
Lam, P	2000	122	7600	J Am Chem Soc	CAPLUS
Liu, Q	2000	41	8045	Tetrahedron Lett	CAPLUS
Matthews, D	1993	34	3057	Tetrahedron Lett	CAPLUS
Matthews, D	1994	35	1027	Tetrahedron Lett	CAPLUS
Matthews, D	1994	35	5177	Tetrahedron Lett	CAPLUS
McCarthy, J	1991	113	7439	J Am Chem Soc	CAPLUS
Netherton, M	2001	3	4295	Org Lett	CAPLUS
Nishihara, Y	2000	65	1780	J Org Chem	CAPLUS
Sabol, J	1992	33	3101	Tetrahedron Lett	CAPLUS
Scott, W	1986	108	3033	J Am Chem Soc	CAPLUS
Stang, P	1982		85	Synthesis	CAPLUS

L12 ANSWER 3 OF 10 CASREACT COPYRIGHT 2005 ACS on STN

AN 139:85196 CASREACT

TI Catalytic Asymmetric Synthesis of Quaternary Carbons Bearing Two Aryl Substituents. Enantioselective Synthesis of 3-Alkyl-3-Aryl Oxindoles by Catalytic Asymmetric Intramolecular Heck Reactions

AU Dounay, Amy B.; Hatanaka, Keiko; Kodanko, Jeremy J.; Oestreich, Martin; Overman, Larry E.; Pfeifer, Lance A.; Weiss, Matthew M.

CS Department of Chemistry, University of California, Irvine, CA, 92697-2025, USA

SO Journal of the American Chemical Society (2003), 125(20), 6261-6271  
CODEN: JACSAT; ISSN: 0002-7863

PB American Chemical Society

DT Journal

LA English

RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Alcazar-Roman, L	2002	21	491	Organometallics	CAPLUS
Amatore, C	1997	119	5176	J Am Chem Soc	CAPLUS
Amatore, C	1999	576	254	J Organomet Chem	CAPLUS
Amatore, C	2001	20	3241	Organometallics	CAPLUS
Anthoni, U	1999	13	163	Alkaloids:Chemical a	CAPLUS
Ashimori, A	1998	120	6477	J Am Chem Soc	CAPLUS
Ashimori, A	1998	120	6488	J Am Chem Soc	CAPLUS
Ashimori, A	1993	58	6949	J Org Chem	CAPLUS
Betzer, J	1997	62	7768	J Org Chem	CAPLUS
Carpenter, N	1989	54	5846	J Org Chem	CAPLUS
Christoffers, J	2001	40	4591	Angew Chem, Int Ed	CAPLUS
Cochran, J	1990	31	6621	Tetrahedron Lett	CAPLUS
Corey, E	1998	37	388	Angew Chem, Int Ed	
Dankwardt, J	1995	60	2312	J Org Chem	CAPLUS
Donde, Y	2000			Catalytic Asymmetric	
Dounay, A	2003	103		Chem Rev, in press	CAPLUS
Farina, V	1991	113	9585	J Am Chem Soc	CAPLUS
Farina, V	1994	59	5905	J Org Chem	CAPLUS

Flack, H	1983	A39	876	Acta Crystallogr	CAPLUS
Han, X	1999	121	7600	J Am Chem Soc	CAPLUS
Hii, K	1997	36	984	Angew Chem, Int Ed E	CAPLUS
Kelly, T	1994	35	9003	Tetrahedron Lett	CAPLUS
Lebsack, A	2002	124	9008	J Am Chem Soc	CAPLUS
Liebeskind, L	1990	55	5359	J Org Chem	CAPLUS
Link, J	2002	60	157	Org React	CAPLUS
Matsuura, T	1998	120	6500	J Am Chem Soc	CAPLUS
Minor, K	1997	62	6379	J Org Chem	
Nilson, P	2001	123	8217	J Am Chem	
Oestreich, M	2001	40	1439	Angew Chem, Int Ed	CAPLUS
Olah, G	1974	96	2892	J Am Chem Soc	CAPLUS
Overman, L	2000	39	4596	Angew Chem, Int Ed	CAPLUS
Overman, L	1997	36	518	Angew Chem, Int Ed E	CAPLUS
Ozawa, F	1992		2177	Chem Lett	CAPLUS
Park, Y	1994	31	1625	J Heterocycl Chem	CAPLUS
Sato, Y	1989	54	4738	J Org Chem	CAPLUS
Shibasaki, M	1996		119	Advances in Metal-Or	CAPLUS
Shibasaki, M	1999		1	J Organomet Chem	CAPLUS
Stahl, S	2003	125	12	J Am Chem Soc	CAPLUS
Takahashi, C	1994		1859	J Chem Soc, Perkin T	CAPLUS
Takaya, H	1986	51	629	J Org Chem	CAPLUS
The Cambridge Crystallo				deposit@ccdc.cam.ac.	
Ucar, H	1998	41	1138	J Med Chem	CAPLUS
Witulski, B	2000	56	8473	Tetrahedron	CAPLUS
Zhang, H	1990	55	1857	J Org Chem	CAPLUS

L12 ANSWER 4 OF 10 CASREACT COPYRIGHT 2005 ACS on STN

AN 138:321121 CASREACT

TI Practical Asymmetric Synthesis of 1,2-Diamines in the 3-Aminoazepane Series

AU Cutri, S.; Bonin, M.; Micouin, L.; Husson, H.-P.; Chiaroni, A.

CS Laboratoire de Chimie Therapeutique, UMR 8638 associee au CNRS et a l'Universite Rene Descartes, Paris, 75270, Fr.

SO Journal of Organic Chemistry (2003), 68(7), 2645-2651

CODEN: JOCEAH; ISSN: 0022-3263

PB American Chemical Society

DT Journal

LA English

RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Alexakis, A	1996	68	531	Pure Appl Chem	CAPLUS
Bloch, R	1998	98	1407	Chem Rev	CAPLUS
Bonin, M	1992	70	54	Org Synth	CAPLUS
Chong, H	2002		2080	J Chem Soc, Perkin T	CAPLUS
Chong, H	2001	66	7745	J Org Chem	CAPLUS
Corey, E	1989	111	5493	J Am Chem Soc	CAPLUS
Cutri, S	2000	41	1179	Tetrahedron Lett	CAPLUS
Enders, D	1997	8	1895	Tetrahedron:Asymmetr	CAPLUS
Evans, A	1999	1	1929	Org Lett	
Froelich, O	1996	61	6700	J Org Chem	CAPLUS
Hirokawa, Y	1998	8	619	Bioorg Med Chem Lett	CAPLUS
Jung, M	2000	2	2659	Org Lett	CAPLUS
Kantorowski, E	2000	56	4317	Tetrahedron	CAPLUS
Kimura, K	1987	52	836	J Org Chem	CAPLUS
Lucet, D	1998	37	2581	Angew Chem, Int Ed	
Matecka, D	1996	39	4704	J Med Chem	CAPLUS
Meyers, A	2001	66	1413	J Org Chem	CAPLUS
Pawlenko, S	1992	E14a/		Houben-Weyl Methoden	
Rezler, E	1997	40	3508	J Med Chem	CAPLUS

Steining, A	2000	32	205	Org Prep Proc Int	
Stevens, R	1984	17	289	Acc Chem Res	CAPLUS
Zhao, S	1999	7	1647	Bioorg Med Chem	CAPLUS

L12 ANSWER 5 OF 10 CASREACT COPYRIGHT 2005 ACS on STN

AN 138:287516 CASREACT

TI Synthesis of Two Fluoro Analogues of the Nicotinic Acetylcholine Receptor Agonist UB-165

AU Sutherland, Andrew; Gallagher, Timothy; Sharples, Christopher G. V.; Wonnacott, Susan

CS School of Chemistry, University of Bristol, Bristol, BS8 1TS, UK

SO Journal of Organic Chemistry (2003), 68(6), 2475-2478

CODEN: JOCEAH; ISSN: 0022-3263

PB American Chemical Society

DT Journal

LA English

RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Bouillon, A	2002	58	2885	Tetrahedron	CAPLUS
Bouillon, A	2002	58	3323	Tetrahedron	CAPLUS
Carroll, F	2001	44	2229	J Med Chem	CAPLUS
Carroll, F	2001	44	4039	J Med Chem	CAPLUS
Damaj, M	1994	664	34	Brain Res	CAPLUS
Gohlke, H	2002	45	1064	J Med Chem	CAPLUS
Gungor, T	1981	215	139	J Organomet Chem	CAPLUS
Holladay, M	1997	40	4169	J Med Chem	CAPLUS
Karig, G	2001	3	835	Org Lett	CAPLUS
Lin, N	1998	8	991	Expert Opin Ther Pat	CAPLUS
Mongin, F	2001	57	4059	Tetrahedron	CAPLUS
Negishi, E	1982	18	117	Heterocycles	CAPLUS
Queguiner, G	1991	52	187	Adv Heterocycl Chem	CAPLUS
Schmitt, J	2000	7	749	Curr Med Chem	CAPLUS
Senokuchi, K	1994		343	Synlett	CAPLUS
Sharples, C	2002	45	3235	J Med Chem	CAPLUS
Sharples, C	2000	20	2783	J Neurosci	CAPLUS
Sullivan, J	1994	271	624	J Pharmacol Exp Ther	CAPLUS
Suzuki, A	1994	66	213	Pure Appl Chem	CAPLUS
Tonder, J	2001	8	651	Curr Med Chem	CAPLUS
Williams, M	1996	5	1035	Exp Opin Invest Drug	CAPLUS
Wright, E	1997	7	2867	Bioorg Med Chem Lett	CAPLUS

L12 ANSWER 6 OF 10 CASREACT COPYRIGHT 2005 ACS on STN

AN 138:271643 CASREACT

TI Preparation of Nitrogen-Containing  $\pi$ -Deficient Heteroaromatic Grignard Reagents: Oxidative Magnesiation of Nitrogen-Containing  $\pi$ -Deficient Halogenoheteroaromatics Using Active Magnesium

AU Sugimoto, Osamu; Yamada, Shigeru; Tanji, Ken-ichi

CS School of Food and Nutritional Sciences, Laboratory of Organic Chemistry, University of Shizuoka, Shizuoka, 422-8526, Japan

SO Journal of Organic Chemistry (2003), 68(5), 2054-2057

CODEN: JOCEAH; ISSN: 0022-3263

PB American Chemical Society

DT Journal

LA English

RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Abarbri, M	2000	65	4618	J Org Chem	CAPLUS

Abarbri, M	1999	40	7449	Tetrahedron Lett	CAPLUS
Bell, A	1987		843	Synthesis	CAPLUS
Berillon, L	1998		1359	Synlett	CAPLUS
Chelucci, G	1992	3	1235	Tetrahedron:Asymmetr	CAPLUS
Furukawa, N	1987	28	5845	Tetrahedron Lett	CAPLUS
Gomez, I	2000	56	4043	Tetrahedron	CAPLUS
Gros, P	1997		3597	J Chem Soc, Perkin T	CAPLUS
Hannon, M	1998	39	8509	Tetrahedron Lett	CAPLUS
Higashino, T	1962	10	1043	Chem Pharm Bull	CAPLUS
Kondo, Y	1994	37	1467	Heterocycles	CAPLUS
Kondo, Y	1996		1781	J Chem Soc, Perkin T	CAPLUS
Moody, C	1998		1039	Synthesis	CAPLUS
Peterson, M	1997	62	8237	J Org Chem	CAPLUS
Sauter, F	1988	119	1427	Monatsh Chem	CAPLUS
Sell, M	1993	34	6007	Tetrahedron Lett	CAPLUS
Sugimoto, O	2001	84	1112	Helv Chim Acta	CAPLUS
Sugimoto, O	2001	57	2133	Tetrahedron	CAPLUS
Sugimoto, O	1999	40	2139	Tetrahedron Lett	CAPLUS
Sugimoto, O	1999	40	7477	Tetrahedron Lett	CAPLUS
Sugimoto, O	2002	43	3355	Tetrahedron Lett	CAPLUS
Tanji, K	1991	39	2793	Chem Pharm Bull	CAPLUS
Tilford, C	1948	70	4001	J Am Chem Soc	CAPLUS
Traynelis, V	1974	96	7289	J Am Chem Soc	CAPLUS
Trecourt, F	2000	56	1349	Tetrahedron	CAPLUS
Trecourt, F	1999	40	4339	Tetrahedron Lett	CAPLUS
Tschitschibabin, A	1928	61	547	Ber	
Xiong, H	1989	54	3247	J Org Chem	CAPLUS

L12 ANSWER 7 OF 10 CASREACT COPYRIGHT 2005 ACS on STN

AN 137:369720 CASREACT

TI Palladium-promoted arylation of functionalized organolithium compounds via their zinc derivatives

AU Yus, Miguel; Gomis, Joaquin

CS Departamento de Quimica Organica, Facultad de Ciencias, Universidad de Alicante, Alicante, 03080, Spain

SO European Journal of Organic Chemistry (2002), (12), 1989-1995

CODEN: EJOCFK; ISSN: 1434-193X

PB Wiley-VCH Verlag GmbH

DT Journal

LA English

RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Almena, J	1995	51	3351	Tetrahedron	CAPLUS
Almena, J	1995	51	3365	Tetrahedron	CAPLUS
Anon	1999			Organozinc Reagents,	
Arnauld, T	2002	43	1081	Tetrahedron Lett	CAPLUS
Bachki, A	1998	39	7759	Tetrahedron Lett	CAPLUS
Barluenga, J	1987		425	J Chem Soc, Chem Com	CAPLUS
Barluenga, J	1988		3113	J Chem Soc, Perkin T	CAPLUS
Boudier, A	2000	39	4414	Angew Chem Int Ed	
Boudier, A	2000	112	4584	Angew Chem	
El Ali, B	1996	112	195	J Mol Catal A: Chem	CAPLUS
Erdik, E	1996			Organozinc Reagents	
Gil, J	1993	49	4923	Tetrahedron	CAPLUS
Gomez, C	1999	55	7017	Tetrahedron	CAPLUS
Gomez, C	1998	39	1397	Tetrahedron Lett	CAPLUS
Gomis, J				unpublished results	
Goosen, A	1995	6	1227	J Chem Soc, Perkin T	
Knochel, P	1998			Metal-Catalysed Cros	
Knochel, P	1995		393	Synlett	CAPLUS

Knochel, P	1998	54	8275	Tetrahedron	CAPLUS
Lau, C	1989	67	1384	Can J Chem	CAPLUS
Lau, J	1995			WO 9500486	CAPLUS
Najera, C	2002			Curr Org Chem, in pr	
Najera, C	1997	1	67	Recent Res Devel Org	CAPLUS
Najera, C	1991	2	155	Trends Org Chem	CAPLUS
Negishi, E	1998			Metal-Catalysed Cros	
Omae, I	1998		37	Applications of Orga	
Ramon, D	2000		225	Eur J Org Chem	CAPLUS
Ramon, D	1991	56	3825	J Org Chem	CAPLUS
Ramon, D	1990	31	3763	Tetrahedron Lett	CAPLUS
Sakamoto, T	1993		563	Synthesis	CAPLUS
Schollkopf, U	1970	13/I	216	Metallorganische Ver	
Tokunaga, M	2001	123	11917	J Am Chem Soc	CAPLUS
Van Atten, M	1993	36	3985	J Med Chem	CAPLUS
Van Herwijnen, H	2001	66	2874	J Org Chem	CAPLUS
Wakefield, B	1988			Organolithium Method	
Wakefield, B	1988		108	Organolithium Method	
Yus, M	1996	25	155	Chem Soc Rev	CAPLUS
Yus, M	1991		398	J Chem Soc, Chem Com	CAPLUS
Yus, M	1992	57	750	J Org Chem	CAPLUS
Yus, M	2002			Latv Kim Z, in press	
Yus, M	1997	17	73	Rev Heteroatom Chem	CAPLUS
Yus, M	2001		1197	Synlett	CAPLUS
Yus, M	2001	57	10119	Tetrahedron	CAPLUS
Yus, M	2001	57	5799	Tetrahedron	CAPLUS
Yus, M	2001	42	3455	Tetrahedron Lett	CAPLUS
Yus, M	2001	42	5721	Tetrahedron Lett	CAPLUS

L12 ANSWER 8 OF 10 CASREACT COPYRIGHT 2005 ACS on STN

AN 137:201213 CASREACT

TI Oxidative magnesiation of halogenopyridines: introduction of electrophilic substituents to the pyridine moiety under the Barbier condition

AU Sugimoto, Osamu; Yamada, Shigeru; Tanji, Ken-ichi

CS School of Food and Nutritional Sciences, Laboratory of Organic Chemistry, University of Shizuoka, Shizuoka, 422-8526, Japan

SO Tetrahedron Letters (2002), 43(18), 3355-3357

CODEN: TELEAY; ISSN: 0040-4039

PB Elsevier Science Ltd.

DT Journal

LA English

RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
=====	=====	=====	=====	=====	=====
Abarbri, M	2000	65	4618	J Org Chem	CAPLUS
Abarbri, M	1999	40	7449	Tetrahedron Lett	CAPLUS
Bell, A	1987		843	Synthesis	CAPLUS
Berillon, L	1998		1359	Synlett	CAPLUS
Furukawa, N	1987	28	5845	Tetrahedron Lett	CAPLUS
Gomez, I	2000	56	4043	Tetrahedron	CAPLUS
Hannon, M	1998	39	8509	Tetrahedron Lett	CAPLUS
Kondo, Y	1994	37	1467	Heterocycles	CAPLUS
Peterson, M	1997	62	8237	J Org Chem	CAPLUS
Rieke, R	1997	53	1925	Tetrahedron	CAPLUS
Sugimoto, O	2001	57	2133	Tetrahedron	CAPLUS
Trecourt, F	2000	56	1349	Tetrahedron	CAPLUS
Trecourt, F	1999	40	4339	Tetrahedron Lett	CAPLUS

L12 ANSWER 9 OF 10 CASREACT COPYRIGHT 2005 ACS on STN

AN 137:169643 CASREACT



TI The trans-Chlorometalation of Hetero-Substituted Alkynes: A Facile Entry to Unsymmetrical Palladium YCY' (Y, Y' = NR<sub>2</sub>, PPh<sub>2</sub>, OPh<sub>2</sub>, and SR) "Pincer" Complexes  
 AU Ebeling, Gunter; Meneghetti, Mario R.; Rominger, Frank; Dupont, Jairton  
 CS Laboratory of Molecular Catalysis Institute of Chemistry, UFRGS, Porto Alegre, 91501-970, Brazil  
 SO Organometallics (2002), 21(15), 3221-3227  
 CODEN: ORGND7; ISSN: 0276-7333  
 PB American Chemical Society  
 DT Journal  
 LA English  
 RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Albrecht, M	2001	40	3750	Angew Chem, Int Ed	CAPLUS
Albrecht, M	2001	624	271	J Organomet Chem	CAPLUS
Bedford, R	2000	24	745	New J Chem	CAPLUS
Beletskaya, I	2000	41	1075	Tetrahedron Lett	CAPLUS
Bergbreiter, D	1999	121	9531	J Am Chem Soc	CAPLUS
Brandsma, L	1981			Synthesis of Acetylene	
Dijkstra, H	2002		126	Chem Commun	CAPLUS
Dupont, J	2001	4	1917	Eur J Inorg Chem	
Dupont, J	1989		1715	J Chem Soc, Dalton T	CAPLUS
Dupont, J	1997	16	2386	Organometallics	CAPLUS
Dupont, J	1996	15	2299	Polyhedron	CAPLUS
Dyatkin, A	1998	39	3647	Tetrahedron Lett	CAPLUS
Errington, J	1980		2312	J Chem Soc, Dalton T	CAPLUS
Frisch, M	1998			Gaussian 98, Revisio	
Gruber, A	2000	2	1287	Org Lett	CAPLUS
Haenel, M	1991	124	333	Chem Ber	CAPLUS
Holton, R	1988	110	314	J Am Chem Soc	CAPLUS
Huck, W	1996	35	1213	Angew Chem, Int Ed E	CAPLUS
Klusener, P	1990	55	1311	J Org Chem	CAPLUS
Loeb, S	1993		1395	J Chem Soc, Chem Com	CAPLUS
Miyazaki, F	1999	40	7379	Tetrahedron Lett	CAPLUS
Morales-Morales, D	2000		1619	Chem Commun	CAPLUS
Moulton, C	1976		1020	J Chem Soc, Dalton T	CAPLUS
Orpen, A	1989		S1	J Chem Soc, Dalton T	CAPLUS
Portnoy, M	1993	12	4734	Organometallics	CAPLUS
Riera, X	2001		2135	Eur J Inorg Chem	CAPLUS
Rimml, H	1987	30	297	Phosphorus Sulfur	CAPLUS
Sheldrick, G	1996			SADABS	
Sheldrick, G	1997			SHELXTL V5.10	
Sonogashira, K	1975		4467	Tetrahedron Lett	CAPLUS
Steenwinkel, P	1998	4	759	Chem Eur J	CAPLUS
Steenwinkel, P	1998	4	763	Chem Eur J	CAPLUS

L12 ANSWER 10 OF 10 CASREACT COPYRIGHT 2005 ACS on STN

AN 137:169408 CASREACT

TI Synthesis and Pharmacological Characterization of Novel Analogues of the Nicotinic Acetylcholine Receptor Agonist (+)-UB-165

AU Sharples, Christopher G. V.; Karig, Gunter; Simpson, Graham L.; Spencer, James A.; Wright, Emma; Millar, Neil S.; Wonnacott, Susan; Gallagher, Timothy

CS Department of Biology and Biochemistry, University of Bath, Bath, BA2 7AY, UK

SO Journal of Medicinal Chemistry (2002), 45(15), 3235-3245  
 CODEN: JMCMAR; ISSN: 0022-2623

PB American Chemical Society

DT Journal

LA English

## RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Abraham, M	1989		1355	J Chem Soc, Perkin T	CAPLUS
Badio, B	1994	4	440	Med Chem Res	CAPLUS
Badio, B	1994	45	563	Mol Pharmacol	CAPLUS
Beers, W	1970	228	917	Nature	CAPLUS
Brejc, K	2001	411	269	Nature	CAPLUS
Chen, D	1997	272	24024	J Biol Chem	CAPLUS
Cheng, Y	1973	22	3089	Biochem Pharmacol	
Cordero-Erausquin, M	2000	21	211	Trends Pharmacol Sci	CAPLUS
Dart, M	2000	74	115	Pharm Acta Helv	CAPLUS
Davies, A	1999	38	679	Neuropharmacology	CAPLUS
Drisdel, R	2000	20	133	J Neurosci	CAPLUS
Dukat, M	1996	31	875	Eur J Med Chem	CAPLUS
Dukat, M	1993	4	131	Med Chem Res	
Elgoyhen, A	2001	98	3501	Proc Natl Acad Sci U	CAPLUS
Glennon, R	1994	6	465	Med Chem Res	
Gohlke, H	2002	45	1064	J Med Chem	CAPLUS
Holladay, M	1997	40	4169	J Med Chem	CAPLUS
Jones, S	1999	22	555	Trends Neurosci	CAPLUS
Lewis, T	1997	505	299	J Physiol	CAPLUS
Lukas, R	1999	51	397	Pharmacol Rev	CAPLUS
Macallan, D	1988	226	357	FEBS Lett	CAPLUS
Manallack, D	1996	2	177	Principles in QSAR a	
Marks, M	1996	277	1383	J Pharmacol Exp Ther	CAPLUS
Nobeli, I	1997	18	2060	J Comput Chem	CAPLUS
Role, L	1996	16	1077	Neuron	CAPLUS
Seerden, J	1998	6	2103	Biol Med Chem	CAPLUS
Seguela, P	1993	13	596	J Neurosci	CAPLUS
Sharples, C	2000	20	2783	J Neurosci	CAPLUS
Sheridan, R	1986	29	899	J Med Chem	CAPLUS
Sivilotti, L	1997	500	123	J Physiol	CAPLUS
Spang, J	2000	7	545	Chem Biol	CAPLUS
Spencer, J	2001	3	835	Org Lett	
Swanson, K	1986	29	250	Mol Pharmacol	CAPLUS
Tonder, J	2001	8	651	Curr Med Chem	CAPLUS
Tonder, T	2001	15	247	J Comput-Aided Mol D	
Tonder, T	1999	42	4970	J Med Chem	
Wang, F	1998	273	28721	J Biol Chem	CAPLUS
Wright, E	1997	7	2867	Bioorg Med Chem Lett	CAPLUS
Zoli, M	1998	18	4461	J Neurosci	CAPLUS

=&gt; d l13 bib abs fhit retable tot

L13 ANSWER 1 OF 22 CASREACT COPYRIGHT 2005 ACS on STN

AN 138:73075 CASREACT

TI Process for the preparation of substituted aromatics via lithiation and electrophilic alkylation of haloaromatics

IN Meudt, Andreas; Erbes, Michael; Forstinger, Klaus

PA Clariant G.m.b.H., Germany

SO Eur. Pat. Appl., 11 pp.

CODEN: EPXXDW

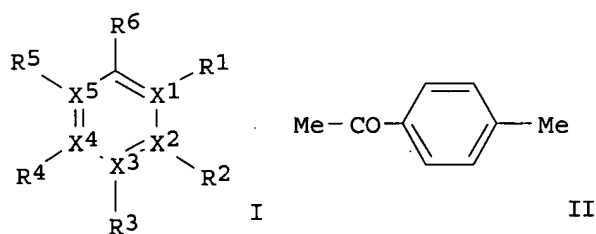
DT Patent

LA German

FAN.CNT 1

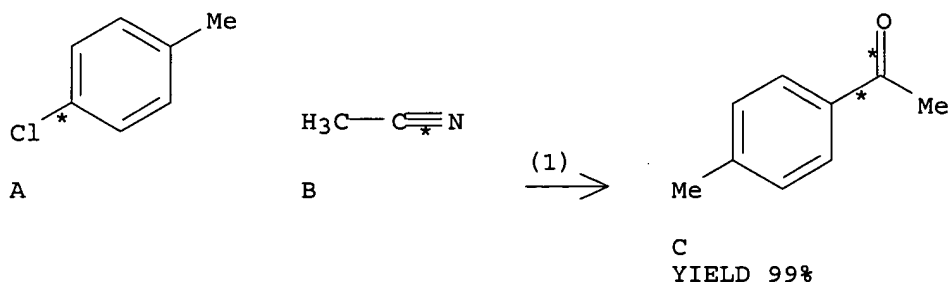
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1270535	A2	20030102	EP 2002-12763	20020608

EP 1270535 A3 20040218  
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR  
 DE 10155209 A1 20030109 DE 2001-10155209 20011109  
 US 2003018192 A1 20030123 US 2002-171444 20020613  
 US 6657093 B2 20031202  
 JP 2003073308 A2 20030312 JP 2002-180218 20020620  
 US 2004073032 A1 20040415 US 2003-677412 20031002  
 PRAI DE 2001-10129765 20010620  
 DE 2001-10155209 20011109  
 US 2002-171444 20020613  
 OS MARPAT 138:73075  
 GI



AB A process for the preparation of compds. I [R1 - R5 = H, (un)substituted alkyl, alkoxy, etc.; R6 = aryl, alkyl] via the lithiation and electrophilic alkylation of haloaroms. I [R1 - R5 = H, (un)substituted alkyl, alkoxy, etc.; R6 = Cl, F] is disclosed. For example, a mixture of p-chlorotoluene (1 mol) and acetonitrile (1.1 mol) was added to a suspension of lithium (2.0 mol) in THF (350 mL) at -50°C. After stirring for 7.5 h, the reaction was quenched with water, the pH adjusted to 2.0 and the mixture heated at reflux for 2 h. The reaction was cooled, extracted with petroleum ether and the combined organic layers were distilled to provide acetophenone II in 99% yield. The preparation of approx. 12-specific examples of compds. I are disclosed.

RX(1) OF 13 A + B ==> C



RX(1) RCT A 106-43-4, B 75-05-8

STAGE(1)

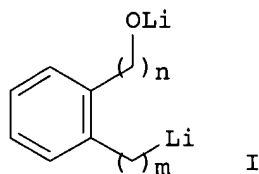
RGT D 7439-93-2 Li

SOL 109-99-9 THF

## STAGE(2)

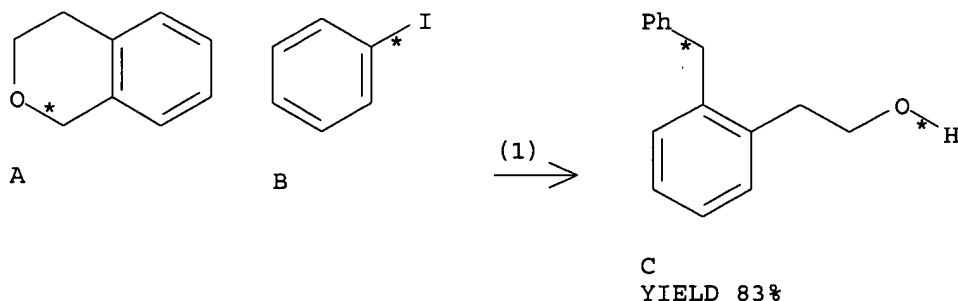
RGT E 7647-01-0 HCl  
 SOL 109-99-9 THF, 7732-18-5 Water  
 PRO C 122-00-9

L13 ANSWER 2 OF 22 CASREACT COPYRIGHT 2005 ACS on STN  
 AN 135:331217 CASREACT  
 TI Negishi cross-coupling with functionalized organozinc compounds prepared by lithium-zinc transmetalation  
 AU Yus, M.; Gomis, J.  
 CS Facultad de Ciencias, Departamento de Quimica Organica, Universidad de Alicante, Alicante, E-03080, Spain  
 SO Tetrahedron Letters (2001), 42(33), 5721-5724  
 CODEN: TELEAY; ISSN: 0040-4039  
 PB Elsevier Science Ltd.  
 DT Journal  
 LA English  
 GI



AB The reaction of some functionalized organolithium compds. I ( $n = 0, 1, 2$ ,  $m = 1, 2$ ) with an equimol. amount of zinc bromide followed by reaction with an aryl or alkenyl bromide in the presence of a catalytic amount of  $\text{Pd}(\text{PPh}_3)_4$  or  $\text{Pd}(\text{PPh}_3)_2(\text{OAc})_2$  (5 mol%) under THF reflux overnight gave the expected cross-coupling compds. These arylation or alkenylation processes, which work also with iodinated substrates, are not possible in the absence of the zinc or palladium compds. under the same reaction conditions.

RX(1) OF 16 A + B ==> C



RX(1) RCT A 493-05-0

## STAGE(1)

RGT D 7439-93-2 Li  
 CAT 1625-91-8 (p-t-BuC6H4)<sub>2</sub>  
 SOL 109-99-9 THF

## STAGE(2)

RGT E 7699-45-8 ZnBr<sub>2</sub>  
 SOL 109-99-9 THF

## STAGE(3)

RCT B 591-50-4  
 CAT 14221-01-3 Pd(PPh<sub>3</sub>)<sub>4</sub>  
 SOL 109-99-9 THF

## STAGE(4)

RGT F 7647-01-0 HCl  
 SOL 7732-18-5 Water  
 PRO C 161950-67-0  
 NTE Negishi cross-coupling, regioselective

## RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Almena, J	1995	51	3351	Tetrahedron	CAPLUS
Almena, J	1995	51	3365	Tetrahedron	CAPLUS
Alonso, F	1997	1	397	Recent Res Devel Org	CAPLUS
Bachki, A	1998	39	7759	Tetrahedron Lett	CAPLUS
Blomberg, C	1993			The Barbier Reaction	
Boudier, A	2000	39	4414	Angew Chem, Int Ed	
Erdik, E	1996			Organozinc Reagents	
Gomez, C	1999	55	7017	Tetrahedron	CAPLUS
Gomez, C	1998	39	1397	Tetrahedron Lett	CAPLUS
Knochel, P	1993	93	2117	Chem Rev	CAPLUS
Knochel, P	1998			Metal-catalysed Cros	
Knochel, P	1999			Organozinc Reagents,	
Knochel, P	1995		393	Synlett	CAPLUS
Knochel, P	1998	54	8275	Tetrahedron	CAPLUS
Najera, C	1997	1	67	Recent Res Devel Org	CAPLUS
Najera, C	1991	2	155	Trends Org Chem	CAPLUS
Negishi, E	1998			Metal-catalysed Cros	
Ramon, D	2000		225	Eur J Org Chem	CAPLUS
Yus, M	1996		155	Chem Soc Rev	CAPLUS
Yus, M	1991		398	J Chem Soc, Chem Com	CAPLUS
Yus, M	1997	17	73	Rev Heteroatom Chem	CAPLUS
Yus, M				Synlett, in press	
Yus, M	2001	57	4411	Tetrahedron	CAPLUS
Yus, M	2001	57	5799	Tetrahedron	CAPLUS
Yus, M	2001	42	3455	Tetrahedron Lett	CAPLUS

L13 ANSWER 3 OF 22 CASREACT COPYRIGHT 2005 ACS on STN

AN 135:107094 CASREACT

TI Cyclopropyl building blocks of organic synthesis. Part 70.  
 2-(Bicyclopropylidenyl)- and 2-(trans-2'-cyclopropylcyclopropyl)-4,4,5,5-tetramethyl-1,3-dioxo-2-borolane and their palladium-catalyzed cross-coupling reactions

AU Lohr, Sandra; De Meijere, Armin

CS Institut für Organische Chemie, Georg-August-Universität Göttingen, Göttingen, 37077, Germany

SO Synlett (2001), (4), 489-492

CODEN: SYNLES; ISSN: 0936-5214

PB Georg Thieme Verlag

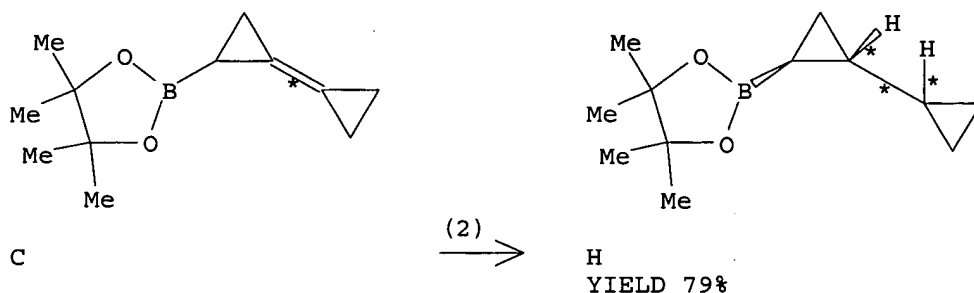
DT Journal

LA English

AB The title bicyclopropylidenylboronate (I) was prepared in 76% yield from lithiated bicyclopropylidene and 2-isopropoxy-4,4,5,5-tetramethyl-1,3-dioxo-2-borolane. Birch reduction of I furnished 2-(trans-2'-cyclopropylcyclopropyl)-4,4,5,5-tetramethyl-1,3-dioxo-2-borolane in 79%

yield. Under Pd catalysis, the latter was successfully coupled with a variety of aryl and alkenyl halides to give the corresponding (2'-cyclopropylcyclopropyl)-substituted arenes (52-75% yield) and alkenes (48-59% yield), resp. Two- and even 3-fold couplings of I with 1,2-C<sub>6</sub>H<sub>4</sub>Br<sub>2</sub> and 1,3,5-C<sub>6</sub>H<sub>3</sub>Br<sub>3</sub> were also successful. Thus, trans-3-(2'-cyclopropylcyclopropyl)acrylate was easily obtained.

RX(2) OF 55 ...C ==> H...



RX(2) RCT C 350031-02-6

STAGE(1)

RGT I 7439-93-2 Li

SOL 7664-41-7 NH<sub>3</sub>

STAGE(2)

SOL 67-56-1 MeOH

STAGE(3)

RGT J 7647-01-0 HCl

SOL 7732-18-5 Water

PRO H 350031-03-7

NTE Burch redn., stereoselective

# RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Charette, A	1996	61	8718	J Org Chem	CAPLUS
Charette, A	1997	38	2809	Tetrahedron Lett	CAPLUS
Chen, H	2000	65	4444	J Org Chem	CAPLUS
de Meijere, A	2000		3809	Eur J Org Chem	CAPLUS
de Meijere, A	1992	58	502	J Org Chem	
de Meijere, A	2000	78	142	Org Synth	
de Meijere, A	1993		681	Synthesis	CAPLUS
de Meijere, A	2000	207	90	Top Curr Chem	
Falck, J	1996	118	6096	J Am Chem Soc	CAPLUS
Foerstner, J	1998		239	Chem Commun	CAPLUS
Hildebrand, J	1996		893	Synlett	CAPLUS
Kazanskii, B	1958		1280	Izvest Akad Nauk SSR	CAPLUS
Kazanskii, B	1958		1238	engl trans	
Lohr, S	2000		2979	Eur J Org Chem	CAPLUS
Miyazawa, K	2001			Mol Cryst Liq Cryst,	
Notzel, M	2001			Eur J Org Chem, in p	
Smith, L	1951	73	3840	J Am Chem Soc	CAPLUS
Sonderquist, J	2000	41	4251	Tetrahedron Lett	
Suzuki, A	1998		49	Metal-catalyzed Cros	CAPLUS
Suzuki, A	1999		147	Perspectives in Orga	CAPLUS
Suzuki, A	1999		441	Transition Metal Cat	

Theberge, C	1996	61	8792	J Org Chem	CAPLUS
Theberge, C	1995	36	5495	Tetrahedron Lett	CAPLUS
Torrado, A	1995		285	Synthesis	CAPLUS
Torrado, A	1995	51	2435	Tetrahedron	CAPLUS
Verbicky, C	2000	41	8723	Tetrahedron Lett	CAPLUS
Wang, X	1996		2663	J Chem Soc Perkin Tr	CAPLUS
Yao, M	2000		1095	Synthesis	CAPLUS
Yao, M	2000	41	9083	Tetrahedron Lett	CAPLUS
Zhang, H	1996	37	1043	Tetrahedron Lett	CAPLUS
Zhou, S	1998	36	3055	Angew Chem Int Ed En	
Zhou, S	1997		198	Synlett	
Zhou, S	2000	41	3951	Tetrahedron Lett	CAPLUS

L13 ANSWER 4 OF 22 CASREACT COPYRIGHT 2005 ACS on STN

AN 134:366848 CASREACT

TI Palladium-catalyzed reactions, 3. Stereoselective palladium-catalyzed C-C coupling reactions with a diazabicyclo[2.2.1]heptene

AU Storsberg, Jorg; Nandakumar, Mecheril V.; Sankaranarayanan, Sivaraman; Kaufmann, Dieter E.

CS Institut fur Organische Chemie der Technischen Universitat, Clausthal-Zellerfeld, 38678, Germany

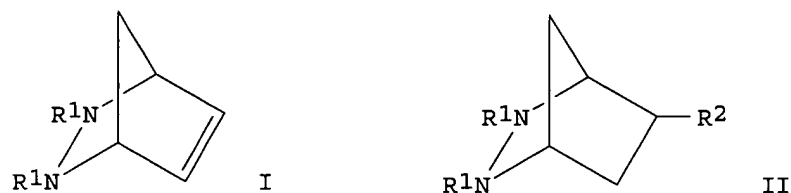
SO Advanced Synthesis & Catalysis (2001), 343(2), 177-180  
CODEN: ASCAF7; ISSN: 1615-4150

PB Wiley-VCH Verlag GmbH

DT Journal

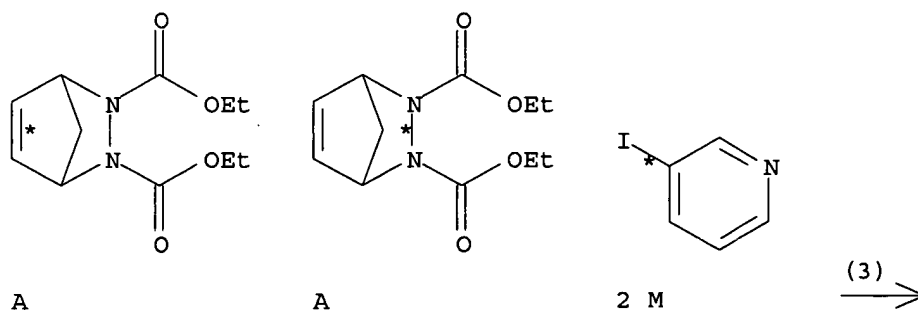
LA English

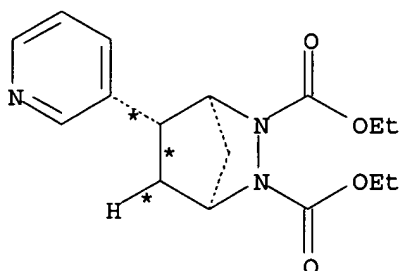
GI



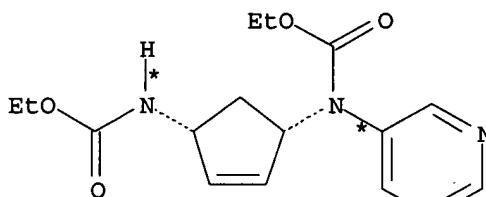
AB Palladium-catalyzed reductive Heck-type reaction of 2,3-diazabicyclic alkene I (R1 = CO<sub>2</sub>Et) with R<sub>2</sub>X (R<sub>2</sub> = Ph, 3-pyridyl, etc.; X = I, Br) gave exo-products II. N-N bond cleavage of these products afforded stereoselectively cis-1,3-diaminocyclopentene derivs.

RX(3) OF 18      2 A + 2 M ==> N + O...





N  
YIELD 77%



O  
YIELD 8%

RX(3) RCT A 14011-60-0, M 1120-90-7  
RGT E 121-44-8 Et3N, F 64-18-6 HCO2H  
PRO N 340153-29-9, O 340153-39-1  
CAT 3375-31-3 Pd(OAc)2, 603-32-7 Ph3As  
SOL 68-12-2 DMF  
NTE Heck-type reaction; catalyst generated in situ; stereoselective

## RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Catellani, M	1996	507	157	J Organomet Chem	CAPLUS
Catellani, M	2000	593-5	240	J Organomet Chem	CAPLUS
Catellani, M	1982	23	4517	Tetrahedron Lett	CAPLUS
Clayton, S	1993	34	7493	Tetrahedron Lett	CAPLUS
Crisp, G	1998	27	427	Chem Soc Rev	CAPLUS
de Meijere, A	1994	106	2473	Angew Chem	CAPLUS
de Meijere, A	1994	33	2379	Angew Chem Inst Ed E	
Diels, O	1925	443	242	Justus Liebig Ann Ch	CAPLUS
Forrest, A	1984	1	1981	J Chem Soc Perkin Tr	
Grabowski, S	1996	37	7951	Tetrahedron Lett	CAPLUS
Hartwig, J	1999	64	5575	J Org Chem	CAPLUS
Larock, R	1990	62	653	Pure Appl Chem	CAPLUS
Mellor, J	1984	1	2927	J Chem Soc Perkin Tr	
Nakamura, K	1999		549	Synlett	CAPLUS
Namyslo, J	1997	130	1327	Chem-Ber/Recueil	CAPLUS
Namyslo, J	1999		114	Synlett	CAPLUS
Namyslo, J	1999		804	Synlett	CAPLUS
Otten, A	1998		1997	Eur J Chem	CAPLUS
Tsuiji, J	1995			Palladium Reagents a	
Wallberg, A	2000	56	8533	Tetrahedron	CAPLUS
Yang, B	1999	1	35	Org Lett	CAPLUS
Yin, J	2000	2	1101	Org Lett	CAPLUS

L13 ANSWER 5 OF 22 CASREACT COPYRIGHT 2005 ACS on STN

AN 134:207699 CASREACT

TI Regioselectivity of arylation of 2,3'-biquinolyl dianion

AU Aksenov, A. V.; Aksenova, I. V.; Borodaev, I. V.; Smushkevich, Yu. I.

CS Organic Chemistry, Stavropol State University, Stavropol, 355009, Russia

SO Proceedings of ECSOC-1: The First International Electronic Conference on Synthetic Organic Chemistry; [and] Proceedings of ECSOC-2: The Second International Electronic Conference on Synthetic Organic Chemistry, Sept. 1-30, 1997, 1998 (1999), Meeting Date 1997-1998, 415-421.

Editor(s): Lin, Shu-Kun; Pombo-Villar, Esteban. Publisher: Molecular Diversity Preservation International, Basel, Switz.

CODEN: 69ASBO

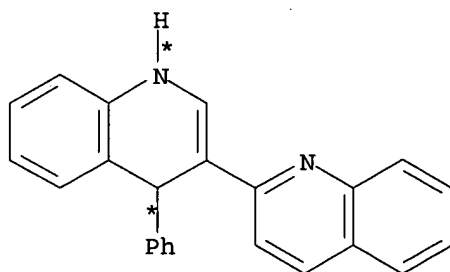
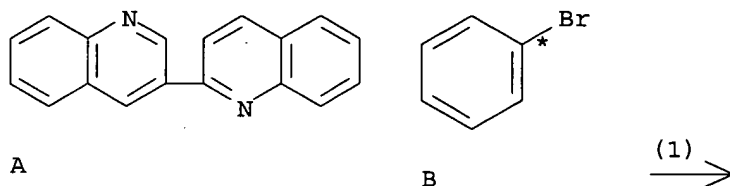
DT Conference; (computer optical disk)



LA English

AB Arylation of the dianion of 2,3'-biquinolyl with aryl- and hetaryl halides forms products at the 4'-position, which on treatment with alkyl halides or water yield 1'-alkyl-1',4'-dihydro-2,3'-biquinolyls or 4'-aryl-1',4'-dihydro-2,3'-biquinolyls, resp. Oxidation of the latter leads to 4'-aryl-2,3'-biquinolyls. The cation dependence of the arylation is shown.

RX(1) OF 18 A + B ==&gt; C...



C  
YIELD 78%

RX(1) RCT A 612-81-7

STAGE(1)

RGT D 7439-93-2 Li

SOL 109-99-9 THF

STAGE(2)

RCT B 108-86-1

SOL 109-99-9 THF

STAGE(3)

SOL 7732-18-5 Water

PRO C 206009-40-7

NTE regioselective

RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Aksenov, A	1996		1391	Khim Geterotsikl Soe	CAPLUS
Banerji, A	1994		9079	Tetrahedron	CAPLUS
Eisch, J	1963		707	J Org Chem	CAPLUS
Holy, N	1974		243	Chem Rev	CAPLUS

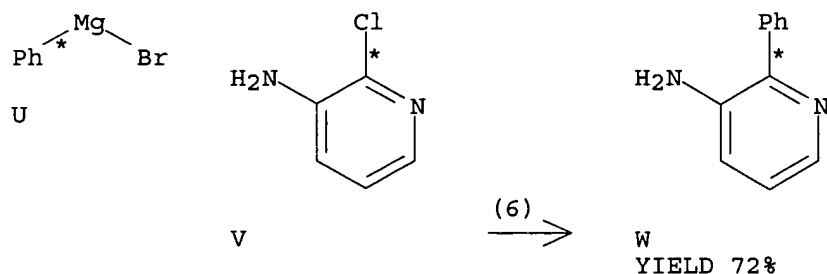
AN 134:193217 CASREACT  
 TI Process for preparing biaryl compounds  
 IN Miller, Joseph A.; Farrell, Robert P.  
 PA Catalytica, Inc., USA  
 SO U.S., 14 pp.  
 CODEN: USXXAM  
 DT Patent  
 LA English  
 FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6194599	B1	20010227	US 1997-825792	19970408
	US 5922898	A	19990713	US 1997-966335	19971107
PRAI	US 1997-825792		19970408		

OS MARPAT 134:193217

AB The title process comprises reacting an arylzinc reagent with an aryl chloride in the presence of a Ni or a Pd catalyst. Thus, PhLi was treated with ZnCl and the product condensed with 4-ClC<sub>6</sub>H<sub>4</sub>CN in the presence of a prepared Ni catalyst to give 81% 4-PhC<sub>6</sub>H<sub>4</sub>CN.

RX(6) OF 9 U + V ==> W



RX(6) RCT U 100-58-3

STAGE(1)

RGT D 7646-85-7 ZnCl<sub>2</sub>  
 SOL 109-99-9 THF

STAGE(2)

RCT V 6298-19-7  
 CAT 14264-16-5 NiCl<sub>2</sub>(PPh<sub>3</sub>)<sub>2</sub>  
 SOL 109-99-9 THF

STAGE(3)

RGT X 7647-01-0 HCl  
 SOL 7732-18-5 Water, 141-78-6 AcOEt

PRO W 101601-80-3

RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Anon	1991			EP 0470794 A1	CAPLUS
Anon	1991			EP 0470795 A1	CAPLUS
Anon	1996			JP 08231454	CAPLUS
Beller	1996			US 5559277	CAPLUS
Bousset	1994			US 5288895	CAPLUS
Bringmann	1990	29	977	Angew, Chem, Int Ed	
Carini	1992			US 5128355	CAPLUS
Carini	1991	34	2525	J Med, Chem	CAPLUS

Clough	1976	41	2252	J Org Chem	CAPLUS
Colon	1981			US 4263466	CAPLUS
Colon	1986	51	2627	J Org Chem	CAPLUS
Corley	1993			US 5237116	CAPLUS
Grushin	1994	94	1047	Chem Rev	CAPLUS
Himmeler	1991			US 4990647	CAPLUS
Lo	1992			US 5130439	CAPLUS
Mantlo	1991	34	2919	J Med Chem	CAPLUS
Meyers	1978	43	1372	J Org Chem	CAPLUS
Negishi	1977	42	1821	J Org Chem	CAPLUS
Percec	1995	60	6895	J Org Chem	CAPLUS
Pridgen	1982	47	4319	J Org Chem	CAPLUS
Puckette	1990			US 4912276	CAPLUS
Rosen	1994			US 5364943	CAPLUS
Sainsbury	1980	36	3327	Tetrahedron Report N	CAPLUS
Silbille	1992		283	J Chem Soc Chem Comm	
Sletzing	1986			US 4620025	CAPLUS
Tamao	1976	49	1958	Bull Chem Soc Japan	CAPLUS
Zembayashi	1977		4089	Tetrahedron Letters	CAPLUS
Zhu	1991	56	1445	J Org Chem	CAPLUS

L13 ANSWER 7 OF 22 CASREACT COPYRIGHT 2005 ACS on STN

AN 133:193124 CASREACT

TI Syntheses in the nitrogen  $\pi$ -deficient heterocycles series using a Barbier type reaction under sonication. Diazines. Part 29

AU Lepretre, Anne; Turck, Alain; Ple, Nelly; Queguiner, Guy

CS IRCOF, Laboratoire de Chimie Organique Fine et Heterocyclique, UPRES-A 6014, Mont St Aignan, 76131, Fr.

SO Tetrahedron (2000), 56(23), 3709-3715

CODEN: TETRAB; ISSN: 0040-4020

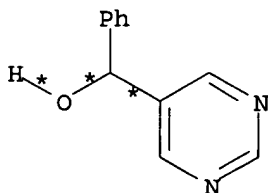
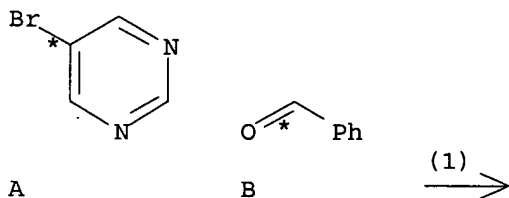
PB Elsevier Science Ltd.

DT Journal

LA English

AB Barbier type reaction with lithium metal has been tested under sonication on pyridines, a cinnoline, and on various diazines. This very convenient method allows a very fast and smooth functionalization of these heterocycles.

RX(1) OF 27 A + B ==> C



C  
YIELD 55%

RX(1) RCT A 4595-59-9, B 100-52-7

## STAGE(1)

RGT D 7439-93-2 Li

SOL 109-99-9 THF

## STAGE(2)

SOL 64-17-5 EtOH

## STAGE(3)

SOL 7732-18-5 Water

## STAGE(4)

SOL 141-78-6 AcOEt

PRO C 126230-69-1

NTE UNTR SOUND

## RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
=====	=====	=====	=====	=====	=====
Arukwe, J	1989		255	J Chem Soc, Perkin T	CAPLUS
Barbier, P	1899	128	100	C R Acad Sci Paris	
Cai, D	1996	35	2537	Tetrahedron Lett	
Ciba-Geigy, AG	1974			FR 2218101	CAPLUS
Ciba-Geigy, AG	1976			DE 2406930	CAPLUS
Coad, P	1963	28	218	J Org Chem	CAPLUS
De Souza-Barboza, J	1988	53	1212	J Org Chem	CAPLUS
Frissen, A	1989	45	5611	Tetrahedron	CAPLUS
Furneaux, R	1997	53	2915	Tetrahedron	CAPLUS
Gilman, H	1946	68	103	J Am Chem Soc	CAPLUS
Gilman, H	1951	16	1485	J Org Chem	CAPLUS
Gilman, H	1951	16	1788	J Org Chem	CAPLUS
Godard, A	1995	40	1055	Heterocycles	CAPLUS
Gronowitz, S	1965	19	1741	Acta Chem Scand	CAPLUS
Gros, P	1997		3071	J Chem Soc, Perkin T	CAPLUS
Gu, Y	1996	37	2565	Tetrahedron Lett	CAPLUS
Heinisch, G	1996	43	151	Heterocycles	CAPLUS
Heinisch, G	1993	30	1685	J Heterocyclic Chem	CAPLUS
Hettrz, H	1969	6	239	J Heterocyclic Chem	
Hirschberg, A	1965	2	209	J Heterocyclic Chem	CAPLUS
Jixiang, C	1992	22	683	Synthetic Commun	
Lepretre, A	2000	56	265	Tetrahedron	CAPLUS
Luche, J	1998			Grenoble Sciences, S	
Luche, J	1980	102	7926	J Am Chem Soc	CAPLUS
Maercker, A	1987	26	972	Angew Chem, Int Ed E	
Majeed, A	1989	45	993	Tetrahedron	CAPLUS
Mallet, M	1990	382	319	J Organomet Chem	CAPLUS
Mallet, M	1986	42	2253	Tetrahedron	CAPLUS
Ndzi, B	1990			PhD Thesis, Universi	
Newcome, G	1980	186	147	J Organomet Chem	
Parham, W	1977	42	257	J Org Chem	CAPLUS
Parkanyi, C	1988	1	342	J Organomet Chem	
Peterson, M	1997	62	8237	J Org Chem	CAPLUS
Ple, N	1995	60	3781	J Org Chem	CAPLUS
Ple, N	1998	54	9701	Tetrahedron	CAPLUS
Queguiner, G	1992	52	187	Adv Heterocycl Chem	
Queguiner, G	1996	105	701	Bull Soc Chim Belg	CAPLUS
Rho, T	1994	24	253	Synthetic Commun	CAPLUS
Rosseels, G	1966	75	5	Bull Soc Chim Belges	CAPLUS
Sandosham, J	1988		455	Acta Chem Scand, Ser	CAPLUS
Shimazaki, M	1991	32	937	Heterocycles	CAPLUS

Shimura, A	1999	3	495	Synthesis	
Taylor, H	1987	30	1359	J Med Chem	CAPLUS
Trecourt, F	2000	56	1349	Tetrahedron	CAPLUS
Turck, A	1994	37	2149	Heterocycles	CAPLUS
Turck, A	1997	34	621	J Heterocyclic Chem	CAPLUS
Turck, A	1988		881	Synthesis	CAPLUS
Turck, A	1995	51	13045	Tetrahedron	CAPLUS
Wibaut, J	1955	74	1003	Recl Trav Chim Pays-	CAPLUS

L13 ANSWER 8 OF 22 CASREACT COPYRIGHT 2005 ACS on STN

AN 131:336801 CASREACT

TI Application of Stille coupling to the preparation of arylated phthalonitriles and phthalocyanines

AU Aranyos, Viviane; Castano, Ana M.; Grennberg, Helena

CS Department of Organic Chemistry, Uppsala University, Uppsala, 751 21, Swed.

SO Acta Chemica Scandinavica (1999), 53(9), 714-720

CODEN: ACHSE7; ISSN: 0904-213X

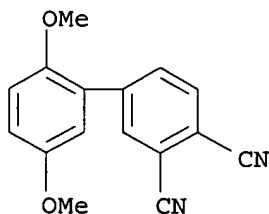
PB Munksgaard International Publishers Ltd.

DT Journal

LA English

AB 4-Phenylphthalonitrile, 4-(2,5-dimethoxyphenyl)phthalonitrile (I), and 2-(3,4-dicyanophenyl)-4-methylpyridine have been prepared in good yields from 4-iodophthalonitrile, the synthesis of which is also discussed, using the Stille coupling method. Such phthalonitriles are precursors of phthalocyanines with the possibility of biphenyl-like orientation of a peripheral substituent with respect to the macrocycle ring plane. As an example, I was used in the preparation of tetrakis(dimethoxyphenyl)phthalocyanine (II). Both II and the corresponding zinc(II) complex show good solubility in nonpolar solvents such as dichloromethane.

RX(12) OF 102 ...Z ==> AH



\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

RX(12) RCT Z 249557-43-5

STAGE(1)

RGT AI 7439-93-2 Li

SOL 71-36-3 BuOH

STAGE(2)

RGT AJ 64-19-7 AcOH

PRO AH 249622-84-2

RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
----------------------------	---------------	--------------	-------------	--------------------------	--------------------

Anderson, S	1979	280	571	Nature	CAPLUS
Badger, G	1964	17	1028	Aust J Chem	CAPLUS
Beletskaya, I	1983	250	551	J Organomet Chem	CAPLUS
Berg, K	1990			Doctoral thesis Norw	
Berg, K	1990			Doctoral thesis Norw	
Betzemeier, B	1997	36	2623	Angew Chem Int Ed En	CAPLUS
Bossard, G	1995	34	1524	Inorg Chem	CAPLUS
Brach, P	1970	7	1403	J Heterocycl Chem	CAPLUS
Brewis, M	1998		969	J Chem Soc Chem Comm	CAPLUS
Cambridge, A	1997	1	77	J Porphyrins Phthal	CAPLUS
Cardenas, D	1996		916	Synlett	CAPLUS
Clarkson, G	1995		1817	J Chem Soc Perkin Tr	CAPLUS
DiMagno, S	1993	58	5983	J Org Chem	CAPLUS
Ellis, G	1987		779	Chem Rev	CAPLUS
Engelkamp, H	1998		979	J Chem Soc Chem Comm	CAPLUS
Farina, V	1996	68	73	Pure Appl Chem	CAPLUS
Friedman, L	1961	2	2522	J Org Chem	
Hagfeldt, A	1995	95	49	Chem Rev	CAPLUS
Hall, T	1982	6	655	Can J Chem	
Hall, T	1982	6	653	Nouv J Chim	CAPLUS
Idelson, E	1973			US 3857855	CAPLUS
Kalinin, V	1992		413	Synthesis	CAPLUS
Lever, A	1988	11	1	Strem Chem	
Leznoff, C	1989	49	279	Photochem Photobiol	CAPLUS
Leznoff, C	1989	1		Phthalocyanines - Pr	
Leznoff, C	1993	2		Phthalocyanines - Pr	
Leznoff, C	1993	3		Phthalocyanines - Pr	
Leznoff, C	1997	4		Phthalocyanines - Pr	
Malm, J	1992	33	2199	Tetrahedron Lett	CAPLUS
Marcuccio, S	1985	65	3057	Can J Chem	
Mervis, S	1993	6	1003	Kirk-Othmer Encyclop	
Mitchell, T	1992		803	Synthesis	CAPLUS
Nazeeruddin, M	1998		719	J Chem Soc Chem Comm	CAPLUS
Negishi, E	1982	15	340	Acc Chem Res	CAPLUS
ORegan, B	1991	353	737	Nature	CAPLUS
Piet, D				to be published in J	
Piet, D				to be published in J	
Polley, R	1995	60	8278	J Org Chem	CAPLUS
Potts, K	1966	31	251	J Org Chem	CAPLUS
Richter, B	1990	112	8064	J Am Chem Soc	
Stille, J	1986	25	508	Angew Chem Int Ed En	
Tomoda, H	1980		1277	Chem Lett	CAPLUS
van Nostrum, C	1995	1	171	Chem Eur J	CAPLUS
van Nostrum, C	1996		2385	J Chem Soc Chem Comm	CAPLUS
Young, J	1990	9	4239	Beilstein	
Young, J	1990	9	458	Beilstein	
Young, J	1990	55	2157	J Org Chem	

L13 ANSWER 9 OF 22 CASREACT COPYRIGHT 2005 ACS on STN

AN 131:199610 CASREACT

TI Synthesis of dinucleating phenanthroline-based ligands

AU Lam, Fung; Feng, MaoQi; Chan, Kin Shing

CS Departments of Chemistry, The Chinese University of Hong Kong, Shatin, Hong Kong

SO Tetrahedron (1999), 55(28), 8377-8384

CODEN: TETRAB; ISSN: 0040-4020

PB Elsevier Science Ltd.

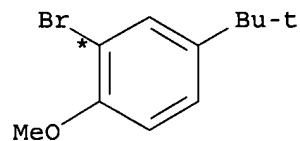
DT Journal

LA English

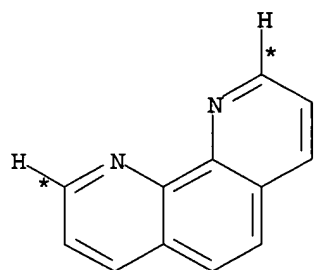
AB Phenolic bridged dinucleating phenanthroline-pyridine, phenanthroline-phosphine, phenanthroline-alc., and phenanthroline-imine

ligands have been synthesized from 1,10-phenanthroline via Stille and Suzuki cross couplings.

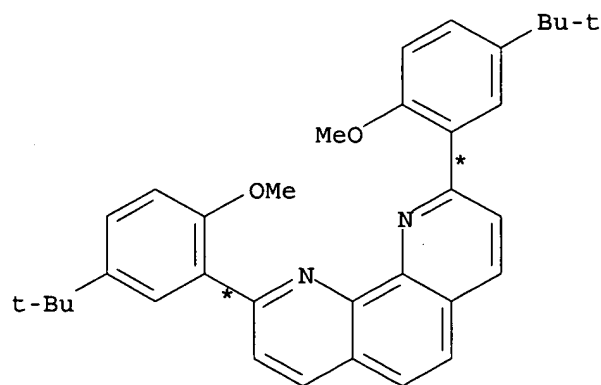
RX(1) OF 29      2 A + B ==> C...



2 A



B



C

YIELD 80%

RX(1)      RCT   A 41280-65-3

STAGE(1)

RGT   D 7439-93-2 Li

SOL   60-29-7 Et2O

STAGE(2)

RCT   B 66-71-7

SOL   108-88-3 PhMe

STAGE(3)

SOL 7732-18-5 Water  
PRO C 171002-41-8

## RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Atkins, A	1996		457	J Chem Soc Chem Comm	CAPLUS
Collman, J	1995	117	692	J Am Chem Soc	CAPLUS
Dietrich-Buchecker, C	1982	23	5291	Tetrahedron Lett	CAPLUS
Hansen, K	1996	118	10924	J Am Chem Soc	CAPLUS
Judice, J	1993		1323	J Chem Soc Chem Comm	CAPLUS
Jutzi, P	1983	246	163	J Organomet Chem	CAPLUS
Karlin, K	1993			Bioinorganic chemist	
Lam, F	1995	36	6261	Tetrahedron Lett	CAPLUS
Larrow, J	1994	59	1939	J Org Chem	CAPLUS
Masood, M	1991		111	J Chem Soc Dalton Tr	CAPLUS
Matthews, R	1996	35	2253	Angew Chem Int Ed En	CAPLUS
McCollum, D	1998	270	13	Inorg Chim Acta	CAPLUS
McCollum, D	1996	118	1365	J Am Chem Soc	CAPLUS
McOmie, J	1968	24	2289	Tetrahedron	CAPLUS
Milani, B	1997	16	5064	Organometallics	CAPLUS
Miyaura, N	1995	95	2457	Chem Rev	CAPLUS
Miyaura, N	1981	11	513	Synth Commun	CAPLUS
Nishibayashi, Y	1998	279	540	Science	CAPLUS
Ogawa, S	1974		976	J Chem Soc Perkin Tr	CAPLUS
Rosenwald, R	1952	74	4602	J Am Chem Soc	CAPLUS
Stille, J	1986	25	508	Angew Chem Int Ed En	
Tunney, S	1987	52	748	J Org Chem	CAPLUS
van Veggel, F	1994	94	279	Chem Rev	CAPLUS
Wang, K	1997	119	1470	J Am Chem Soc	CAPLUS
Wolfe, J	1997	119	6054	J Am Chem Soc	CAPLUS

L13 ANSWER 10 OF 22 CASREACT COPYRIGHT 2005 ACS on STN

AN 131:129885 CASREACT

TI Regioselectivity of arylation of 2,3'-biquinolyl dianion

AU Aksenov, A. V.; Aksenova, I. V.; Borovlev, I. V.; Smushkevich, Yu. I.

CS Chair of Organic Chemistry, Stavropol State University, Stavropol, 355009, Russia

SO Molecules [Electronic Publication] (1999), 4(5), 126-134

CODEN: MOLEFW; ISSN: 1420-3049

URL: <http://mdpi.org/molecules/papers/40500126.pdf>

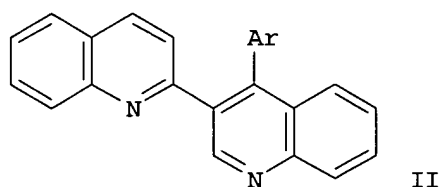
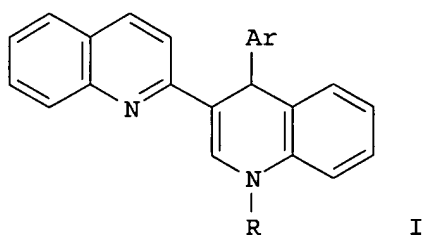
PB Molecular Diversity Preservation International

DT Journal; (online computer file)

LA English

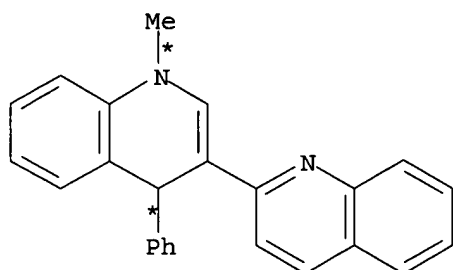
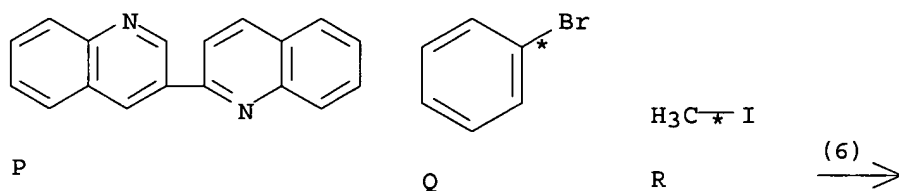
GI





AB The dianion of 2,3'-biquinolyl undergoes arylation at the 4'-position with aryl- and hetaryl halides; the intermediates are treated with alkyl halides or water to yield 1'-alkyl-1',4'-dihydro-2,3'-biquinolyls or 4'-aryl-1',4'-dihydro-2,3'-biquinolyls I (Ar = Ph, 1-naphthyl, 1-methyl-2-benzimidazolyl, 1-isopropyl-2-benzimidazolyl; R = H, Me, CH<sub>2</sub>Ph). The oxidation of the latter leads to 4'-aryl-2,3'-biquinolyls II. The cation dependence of the arylation is shown.

RX(6) OF 18      P + Q + R ==> S



YIELD 75%

RX(6)      RCT P 612-81-7

STAGE(1)

RGT T 7439-93-2 Li  
SOL 109-99-9 THF

## STAGE(2)

RCT Q 108-86-1  
SOL 109-99-9 THF

## STAGE(3)

RCT R 74-88-4  
SOL 109-99-9 THF

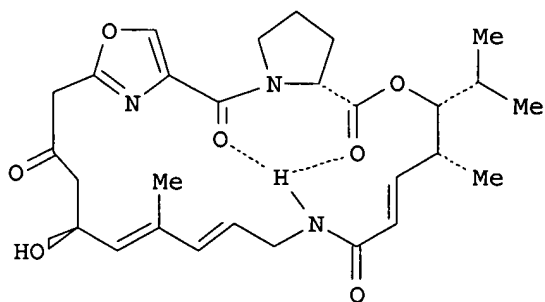
## STAGE(4)

RGT G 7732-18-5 Water  
PRO S 206009-45-2  
NTE regioselective

## RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Aksenov, A	1996	10	1391	Khim Geterotsikl Soe	
Banerji, A	1994	30	9079	Tetrahedron	
Eisch, J	1963	28	707	J Org Chem	CAPLUS
Holy, N	1974	2	243	Chem Rev	

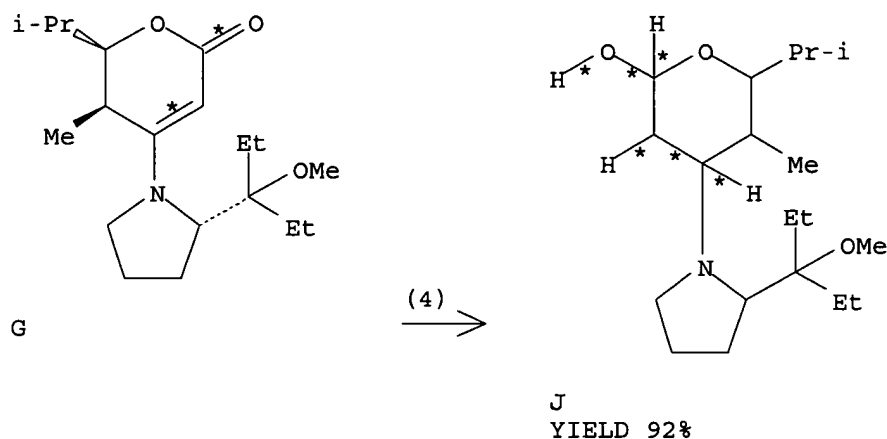
L13 ANSWER 11 OF 22 CASREACT COPYRIGHT 2005 ACS on STN  
AN 124:289060 CASREACT  
TI Total Synthesis of (-)-Virginiamycin M2 Using Second-Generation Vinylogous Urethane Chemistry  
AU Schlessinger, R. H.; Li, Yu-Jang  
CS Department of Chemistry, University of Rochester, Rochester, NY, 14627, USA  
SO Journal of the American Chemical Society (1996), 118(13), 3301-2  
CODEN: JACSAT; ISSN: 0002-7863  
PB American Chemical Society  
DT Journal  
LA English  
GI



I

AB A total synthesis of the title compound I has been achieved for the first time in 24 steps and 2.3% overall yield.

RX(4) OF 255 ...G ==> J...



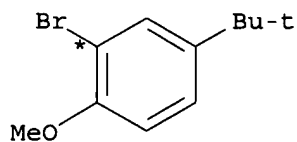
RX(4)      RCT   G 175551-60-7  
             RGT   N 7439-93-2 Li, O 75-65-0 t-BuOH  
             PRO   J 175551-61-8  
             SOL   7664-41-7 NH<sub>3</sub>, 109-99-9 THF  
             NTE   stereoselective

L13   ANSWER 12 OF 22   CASREACT   COPYRIGHT 2005 ACS on STN  
 AN   124:8902   CASREACT  
 TI   Synthesis of acyclic dinucleating phenanthroline-pyridine and  
      phenanthroline-phosphine ligands  
 AU   Lam, Fung; Chan, Kin Shing; Liu, Bang-Ji  
 CS   Dep. Chem., Chinese Univ. Hong Kong, Shatin, Hong Kong  
 SO   Tetrahedron Letters (1995), 36(35), 6261-2  
      CODEN: TELEAY; ISSN: 0040-4039  
 PB   Elsevier  
 DT   Journal  
 LA   English  
 GI

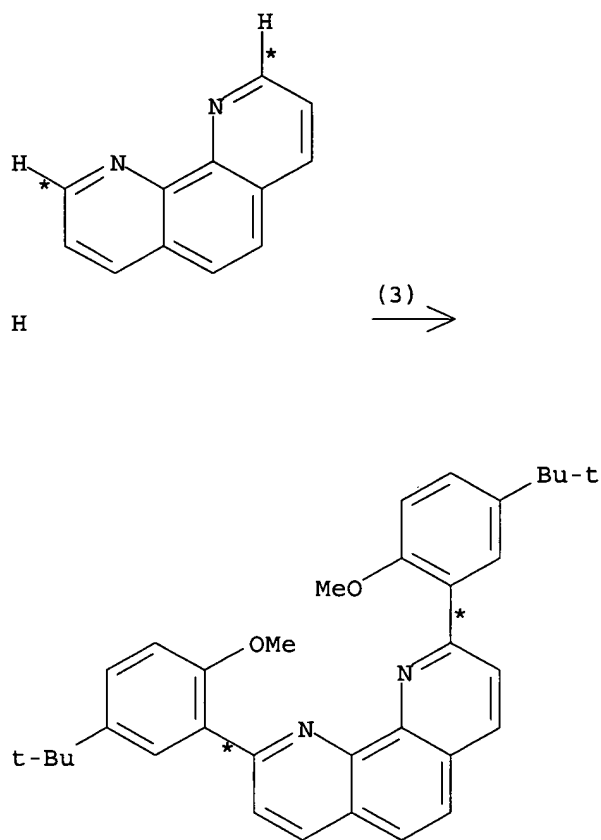
\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB   The novel phenolic bridged dinucleating phenanthroline-pyridine I and  
      phenanthroline-phosphine II ligands have been synthesized from  
      1,10-phenanthroline.

RX(3) OF 27      ...2 F + H ==> I...



2 F



I  
YIELD 80%

RX(3) RCT F 41280-65-3

STAGE(1)

RGT J 7439-93-2 Li  
SOL 60-29-7 Et2O

STAGE(2)

RCT H 66-71-7  
SOL 108-88-3 PhMe

STAGE(3)

SOL 7732-18-5 Water

STAGE(4)

RGT K 1313-13-9 MnO2  
SOL 75-09-2 CH2Cl2  
PRO I 171002-41-8

L13 ANSWER 13 OF 22 CASREACT COPYRIGHT 2005 ACS on STN

AN 120:244929 CASREACT

TI Preparation of  $\pi$ -deficient heteroarylzinc halides by oxidative addition of active zinc and its palladium-catalyzed reaction

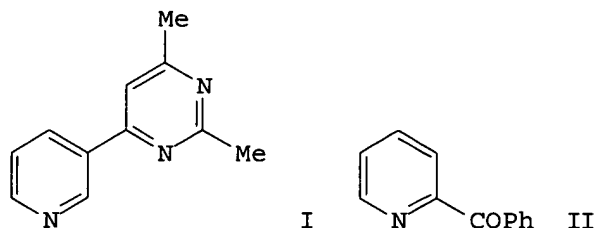
AU Sakamoto, Takao; Kondo, Yoshinori; Murata, Naoko; Yamanaka, Hiroshi

CS Pharm. Inst., Tohoku Univ., Sendai, 980, Japan

SO Tetrahedron (1993), 49(43), 9713-20

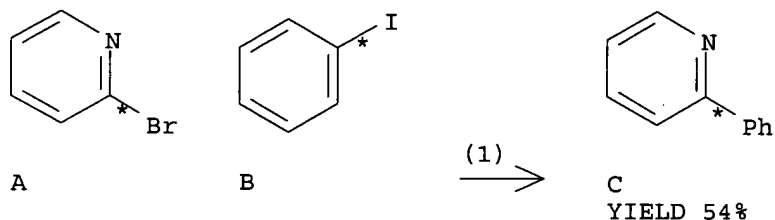
CODEN: TETRAB; ISSN: 0040-4020

DT Journal  
LA English  
GI



AB The oxidative addition of active zinc to iodo- and bromo-substituted  $\pi$ -deficient heteroarenes such as pyridine, pyrimidine, and quinoline gave the corresponding heteroarylzinc halides which were transformed to the arylated and benzoylated derivs., e.g. I and II, by palladium-catalyzed reaction.

RX(1) OF 5      A + B ==> C



RX(1)      RCT A 109-04-6

STAGE(1)

RGT D 91-20-3 Naphthalene, E 7439-93-2 Li, F  
7646-85-7 ZnCl<sub>2</sub>

SOL 109-99-9 THF

STAGE(2)

RCT B 591-50-4  
CAT 14221-01-3 Pd(PPh<sub>3</sub>)<sub>4</sub>  
SOL 109-99-9 THF

PRO C 1008-89-5

L13 ANSWER 14 OF 22 CASREACT COPYRIGHT 2005 ACS on STN

AN 120:217167 CASREACT

TI Indolylzinc iodides by oxidative addition of active zinc to iodoindoles

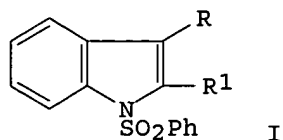
AU Sakamoto, Takao; Kondo, Yoshinori; Takazawa, Nobuo; Yamanaka, Hiroshi

CS Pharm. Inst., Tohoku Univ., Sendai, 980, Japan

SO Tetrahedron Letters (1993), 34(37), 5955-6

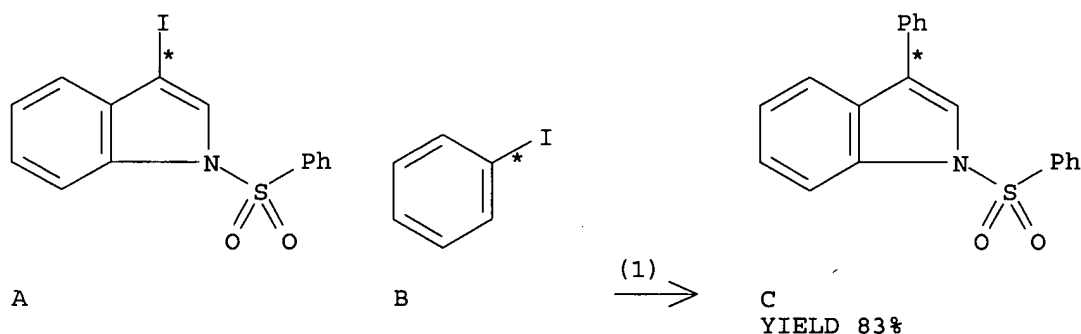
CODEN: TELEAY; ISSN: 0040-4039

DT Journal  
LA English  
GI



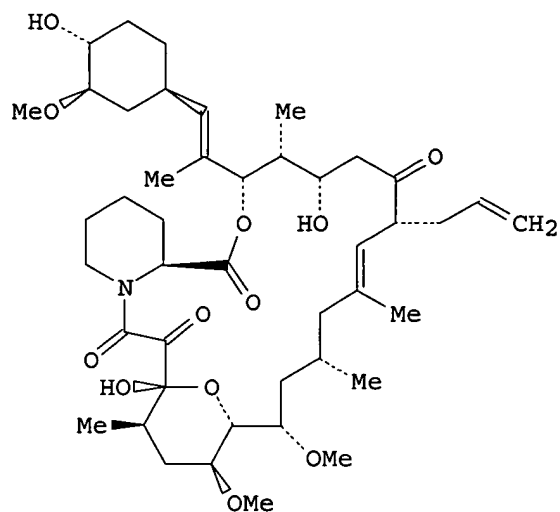
AB Indolylzinc derivs. were prepared by the oxidative addition of active zinc to iodoindoles, e.g. I (R = iodo, R1 = H, CO2Et; R = H, R1 = iodo), which coupled with aromatic halides in the presence of palladium catalyst to give arylated indoles, e.g. I (R = Ph, 2-pyridinyl).

RX(1) OF 6      A + B ==> C



RX(1)      RCT    A 80360-14-1, B 591-50-4  
              RGT    D 91-20-3 Naphthalene, E 7646-85-7 ZnCl2, F 7439-93-2  
                   Li  
              PRO    C 153827-73-7  
              CAT    14221-01-3 Pd(PPh3)4  
              SOL    109-99-9 THF

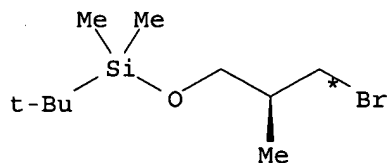
L13    ANSWER 15 OF 22    CASREACT    COPYRIGHT 2005 ACS on STN  
 AN    112:235036    CASREACT  
 TI    Chemistry of tricarbonyl hemiketals and application of Evans technology to  
       the total synthesis of the immunosuppressant (-)-FK-506  
 AU    Jones, Todd K.; Reamer, Robert A.; Desmond, Richard; Mills, Sander G.  
 CS    Merck Sharp and Dohme Res. Lab., Rahway, NJ, 07065-0900, USA  
 SO    Journal of the American Chemical Society (1990), 112(8),  
       2998-3017  
       CODEN: JACSAT; ISSN: 0002-7863  
 DT    Journal  
 LA    English  
 GI



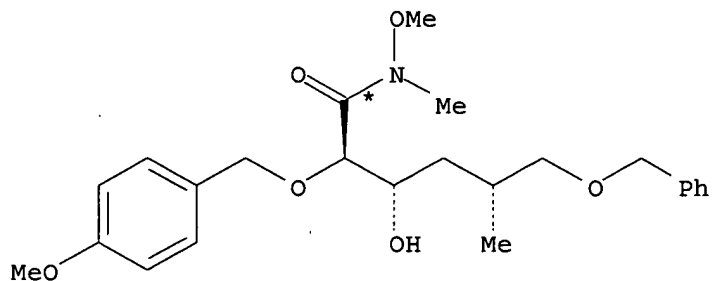
I

AB Details of model studies probing the chemical of the tricarbonyl region of FK-506 (I) are presented, and their use in designing a successful route to I is outlined. Applications of asym. oxazolidinone alkylation-aldol methodol. to a convergent, highly flexible synthesis of the C(10)-C(18) fragment and to improvements in the preparation of the C(20)-C(34) segment are also discussed.

RX(30) OF 853 ...BD + BW ==> BX...

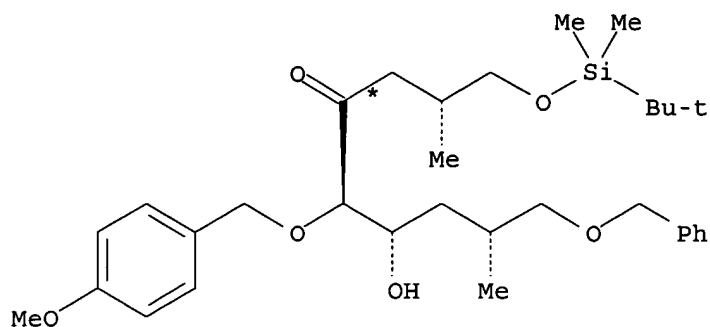


BD



BW

(30)  
→



BX  
YIELD 69%

RX(30) RCT BD 126788-87-2

STAGE(1)

RGT BY 7439-93-2 Li, BZ 7440-23-5 Na  
CAT 7553-56-2 I2  
SOL 60-29-7 Et2O

STAGE(2)

RCT BW 126788-92-9  
SOL 109-99-9 THF  
PRO BX 126788-93-0

L13 ANSWER 16 OF 22 CASREACT COPYRIGHT 2005 ACS on STN

AN 112:76903 CASREACT

TI Ultrasound-promoted coupling of heteroaryl halides in the presence of lithium wire. Novel formation of isomeric bipyridines in a Wurtz-type reaction

AU Osborne, Alan G.; Glass, Kathryn J.; Staley, Miriam L.

CS Dep. Chem., City Univ., London, EC1V 0HB, UK

SO Tetrahedron Letters (1989), 30(27), 3567-8

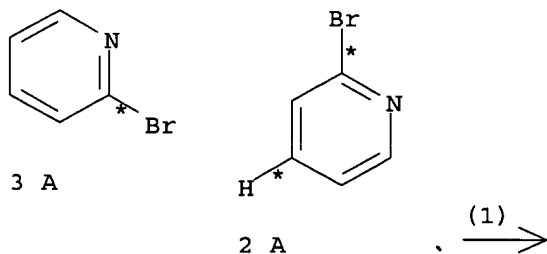
CODEN: TELEAY; ISSN: 0040-4039

DT Journal

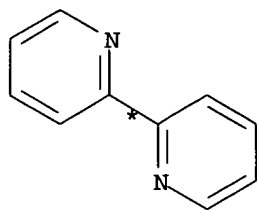
LA English

AB Ultrasonic irradiation of 2-bromopyridine in the presence of Li wire gives 2,2'-bipyridine, 2,4'-bipyridine and 4,4'-bipyridine, a novel formation of isomers in a Wurtz-type reaction. Similar reaction with 3-bromopyridine results in debromination.

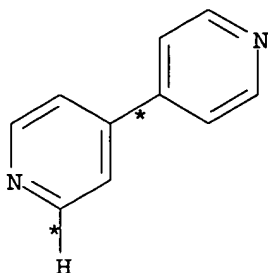
RX(1) OF 2 5 A ==> B + C + D



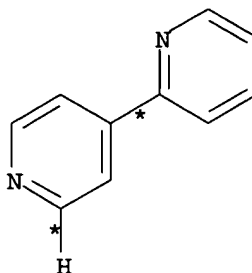




B  
YIELD 65%



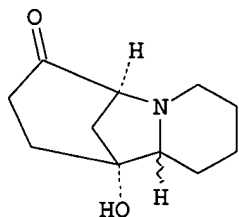
C  
YIELD 30%



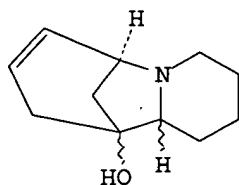
D  
YIELD 5%

RX(1) RCT A 109-04-6  
RGT E 7439-93-2 Li  
PRO B 366-18-7, C 553-26-4, D 581-47-5  
SOL 109-99-9 THF  
NTE ultrasound

L13 ANSWER 17 OF 22 CASREACT COPYRIGHT 2005 ACS on STN  
AN 112:56373 CASREACT  
TI Synthesis of 1-hydroxy-7-azatricyclo[6.3.1.0<sup>2.7</sup>]dodecan-9-ones: potential intermediates for the total synthesis of securinines  
AU Cote, Roland; Bouchard, Pierre; Couture, Yvon; Furstoss, Roland; Waegell, Bernard; Lessard, Jean  
CS Dep. Chim., Univ. Sherbrooke, Sherbrooke, QC, J1K 2R1, Can.  
SO Heterocycles (1989), 28(2), 987-98  
CODEN: HTCYAM; ISSN: 0385-5414  
DT Journal  
LA English  
GI



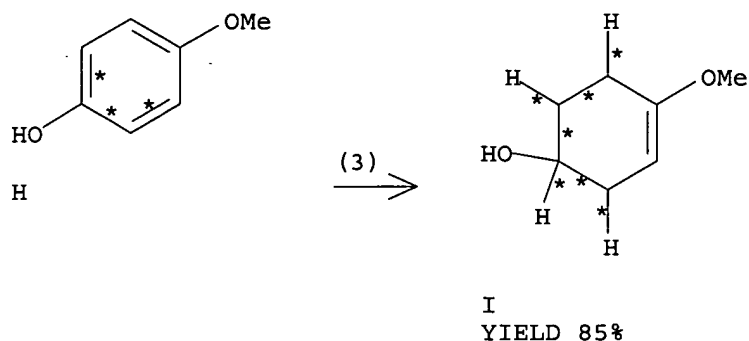
I



II

AB A synthesis of epimeric 1-hydroxy-7-azatricyclo[6.3.1.0<sup>2.7</sup>]dodecan-9-ones I, in ten steps from p-MeOC<sub>6</sub>H<sub>4</sub>OH, is described. I were converted to the corresponding 9(10)-olefinic derivs. II.

RX(3) OF 123 H ==> I...



RX(3)      RCT   H 150-76-5  
             RGT   J 7664-41-7 NH3, K 7439-93-2 Li  
             PRO   I 69125-55-9  
             SOL   60-29-7 Et2O

L13    ANSWER 18 OF 22    CASREACT    COPYRIGHT 2005 ACS on STN

AN    110:153591    CASREACT

TI    Polyquinoline-supported ruthenium catalysts: selective oxidation of alcohols with coated electrodes

AU    Stoessel, S. J.; Elliott, C. M.; Stille, John K.

CS    Dep. Chem., Colorado State Univ., Fort Collins, CO, 80523, USA

SO    Chemistry of Materials (1989), 1(2), 259-68

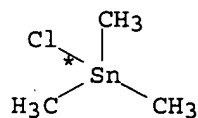
CODEN: CMATEX; ISSN: 0897-4756

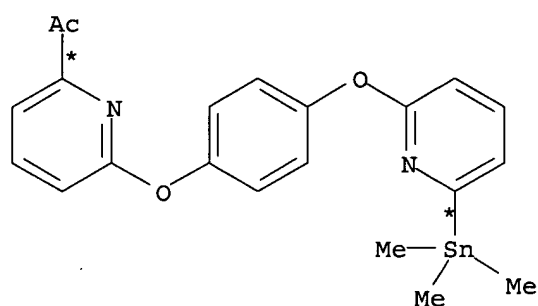
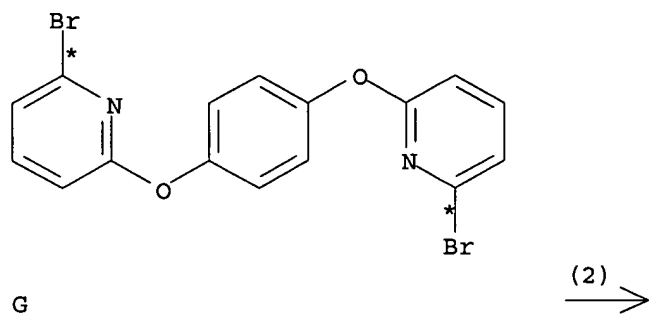
DT    Journal

LA    English

AB    Two ruthenium complexes containing the novel 2-(2-pyridyl)-4-phenylquinoline ligand (qpy), [Ru(trpy)(qpy)OH<sub>2</sub>]<sup>2+</sup> (I) and [Ru(bpy)(qpy)pyOH<sub>2</sub>]<sup>2+</sup> (II) (trpy = 2,2',2''-terpyridyl, bpy = 2,2'-bipyridyl, py = pyridine), were prepared as models for complexes supported on polyquinolines (III) containing qpy units in the backbone. These polymer complexes III•[Ru(trpy)OH<sub>2</sub>]<sup>+</sup> (IV) and III•[Ru(bpy)pyOH<sub>2</sub>]<sup>2+</sup> (V) were synthesized by a sequence of ligand-replacement reactions on Ru(trpy)Cl<sub>3</sub> and [Ru(bpy)py<sub>4</sub>]Cl<sub>2</sub>, resp. Complexes I and II were catalytically active for the electrochem. oxidation of secondary alcs. to ketones and allylic or benzylic primary alcs. to aldehydes. Unactivated primary alcs. were not oxidized. Complexes IV and V coated on electrodes were more selective and were not catalytically active in the electrochem. oxidation of secondary alcs. (or unactivated primary alcs.); oxidation of benzylic and allylic alcs. to aldehydes took place. None of the catalysts carried the oxidation further to the corresponding carboxylic acids. Catalytic currents as high as 1 mA were observed

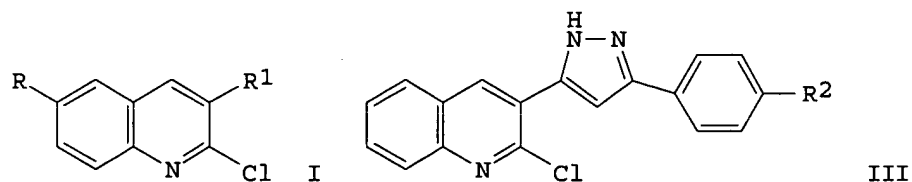
RX(2) OF 50      ...F + G ==> H...





RX(2) RCT F 1066-45-1, G 118537-61-4  
 RGT I 7439-93-2 Li  
 PRO H 118537-62-5  
 SOL 109-99-9 THF

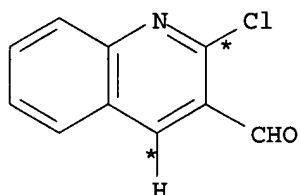
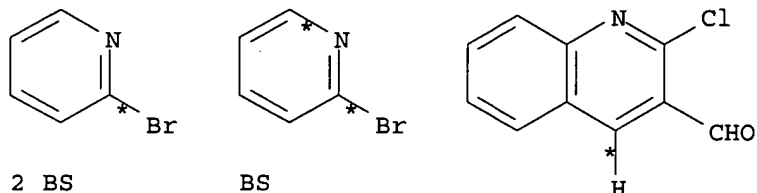
L13 ANSWER 19 OF 22 CASREACT COPYRIGHT 2005 ACS on STN  
 AN 108:112184 CASREACT  
 TI Reactions of 2-chloro-3-formylquinolines  
 AU Srivastava, Ranjan P.; Neelima; Bhaduri, A. P.  
 CS Div. Med. Chem., Cent. Drug Res. Inst., Lucknow, 226 001, India  
 SO Indian Journal of Chemistry, Section B: Organic Chemistry Including  
 Medicinal Chemistry (1987), 26B(5), 418-22  
 CODEN: IJSBDB; ISSN: 0376-4699  
 DT Journal  
 LA English  
 GI



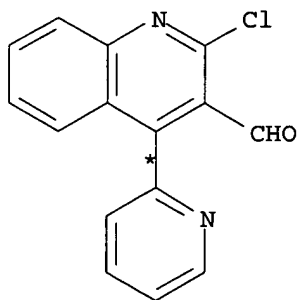
AB Grignard reaction of 2-chloro-3-formylquinoline (I; R = H, R1 = CHO) (II)

with MeMgI followed by pyridinium chlorochromate oxidation gave 3-acetyl-2-chloroquinoline (I; R1 = MeCO) which was condensed with R2C6H4CHO (R2 = H, OMe) to give the corresponding chalcones I (R1 = PhCH:CHCO, 4-MeOC6H4CH:CHCO). Cyclocondensation with NH2NH2.H2O gave pyrazoles III. I (R = H, Me, MeO, etc.; R1 = CHO) was condensed with MeCOCH2COMe to give I [R1 = (MeCO)2C:CH]. Similarly, II was condensed with EtO2CCH2CN to give I [R1 = EtO2CC(CN):CH].

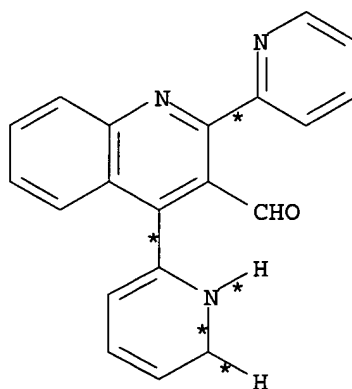
RX(33) OF 80      3 BS + 2 B ==> BT + BU



(33) →



YIELD 28%



YIELD 30%

RX(33)      RCT BS 109-04-6

STAGE(1)

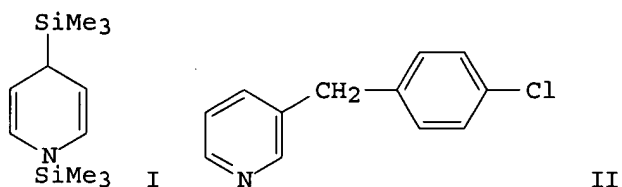
RGT BV 7439-93-2 Li

SOL 60-29-7 Et2O

STAGE(2)

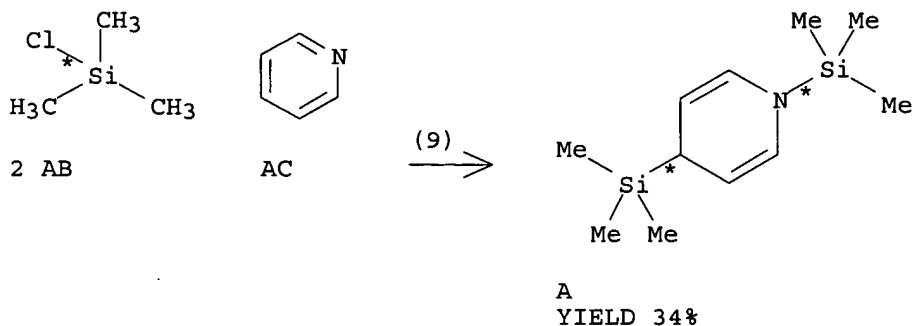
RCT B 73568-25-9  
 SOL 60-29-7 Et2O  
 PRO BT 113232-09-0, BU 113232-10-3

L13 ANSWER 20 OF 22 CASREACT COPYRIGHT 2005 ACS on STN  
 AN 107:175846 CASREACT  
 TI Reactions of 1,4-bis(trimethylsilyl)-1,4-dihydropyridines with carbonyl compounds. A new method for regioselective synthesis of 3-alkylpyridines  
 AU Tsuge, Otohiko; Kanemasa, Shuji; Naritomi, Toshio; Tanaka, Junji  
 CS Interdiscip. Grad. Sch. Eng. Sci., Kyushu Univ., Kasuga, 816, Japan  
 SO Bulletin of the Chemical Society of Japan (1987), 60(4), 1497-504  
 CODEN: BCSJA8; ISSN: 0009-2673  
 DT Journal  
 LA English  
 GI



AB A new method of introducing alkyl groups at the 3-position of pyridines is described. Reductive disilylation of pyridine and its 2-Me, 3-Me, and 4-Me derivs. affords the corresponding 1,4-disilyl-1,4-dihydropyridines. In the presence of a catalytic amts. of Bu<sub>4</sub>N<sup>+</sup>F<sup>-</sup>, these dihydropyridines react smoothly with a variety of aldehydes and ketones to give 3-alkylpyridines. Thus, disilyldihydropyridine I was treated with 4-ClC<sub>6</sub>H<sub>4</sub>CHO in the presence of Bu<sub>4</sub>N<sup>+</sup>F<sup>-</sup> in THF to give 62% (chlorobenzyl)pyridine II.

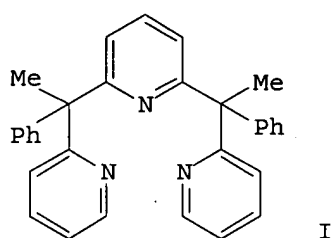
RX(9) OF 55      2 AB + AC ==> A...



RX(9)      RCT AB 75-77-4, AC 110-86-1  
 RGT AD 7439-93-2 Li  
 PRO A 29173-25-9  
 SOL 109-99-9 THF, 7727-37-9 N<sub>2</sub>

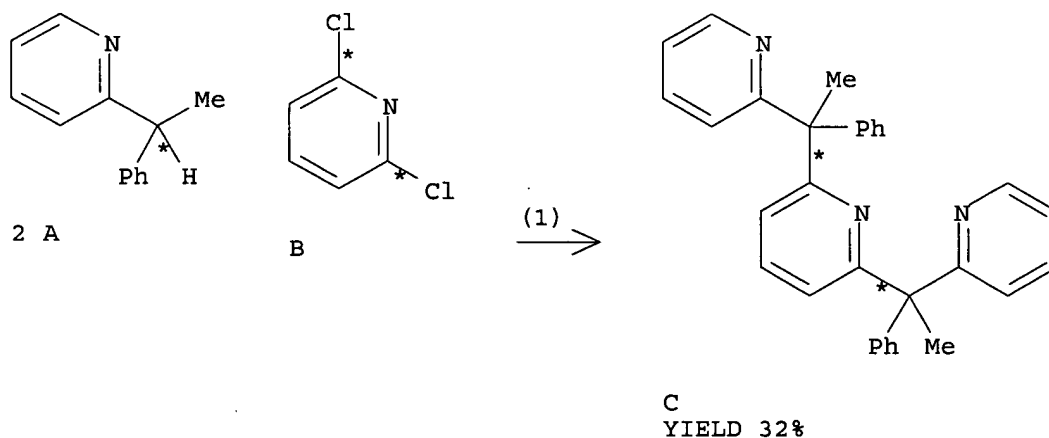
L13 ANSWER 21 OF 22 CASREACT COPYRIGHT 2005 ACS on STN

AN 107:39971 CASREACT  
 TI Synthesis of the tridentate pyridine donor 2,6-bis[1-phenyl-1-(2-pyridyl)ethyl]pyridine (L), including separation of meso and rac diastereoisomers via methylmercury(II) derivatives, and an x-ray structural study of meso-[2,6-bis[1-phenyl-1-(2-pyridyl)ethyl]pyridine-N,N',N'']methylmercury(II) nitrate dihydrate  
 AU Canty, Allan J.; Minchin, Nigel J.; Skelton, Brian W.; White, Allan H.  
 CS Chem. Dep., Univ. Tasmania, Hobart, 7001, Australia  
 SO Journal of the Chemical Society, Dalton Transactions: Inorganic Chemistry (1972-1999) (1986), (10), 2201-4  
 CODEN: JCDTBI; ISSN: 0300-9246  
 DT Journal  
 LA English  
 GI



AB Tridentate pyridine donor ligand I (L) was prepared by treating 2,6-dichloropyridine with lithiated 2-(1-phenylethyl)pyridine. I reacted with MeHgNO<sub>2</sub> to form complexes (II and III) of the meso and racemic diastereoisomers of I, [HgMe(L)]NO<sub>3</sub>·2H<sub>2</sub>O, which were readily separated by fractional crystallization. The ligands meso- and rac-L were liberated from II and III by reaction with aqueous cyanide ion. The structure of II was determined by x-ray crystallog. [MeHg(meso-L)]<sup>+</sup> cations have irregular coordination geometry about the Hg atom, with the ligand present as a tripodal tridentate, HgCN<sub>3</sub>. <sup>1</sup>H NMR spectra for the complexes suggest that the ligand is at least bidentate in MeOH.

RX(1) OF 9 2 A + B ==> C...



RX(1) RCT A 14159-54-7

## STAGE(1)

RGT D 7439-93-2 Li, E 108-86-1 PhBr  
SOL 60-29-7 Et2O

## STAGE(2)

RCT B 2402-78-0  
SOL 108-88-3 PhMe  
PRO C 109056-79-3

L13 ANSWER 22 OF 22 CASREACT COPYRIGHT 2005 ACS on STN

AN 55:118622 CASREACT

TI Action of the Grignard reagent on the amide group. XXXIII. A simple synthesis of nicotine

AU Lukes, R.; Cervinka, Otokar

CS Vysoka skola chem. technol., Prague

SO Collection of Czechoslovak Chemical Communications (1961), 26, 1893-4

CODEN: CCCCAK; ISSN: 0010-0765

DT Journal

LA German

AB cf. CA 55, 19781i. A BuLi solution, prepared from 1.4 g. Li, 4.63 g. BuCl, and 25 ml. Et2O, and cooled with solid CO2, was treated first with 7.9 g. 3-bromopyridine, b. 169-71° (picrate m. 153-4°) and then in 30 min. with 5.66 g. N-methyl-2-pyrrolidone. The mixture was stirred with constant cooling under N 4 hrs., decomposed with 30 ml. 1:1 aqueous HCl, alkalinized

with aqueous NaOH, steam-distilled the distillate neutralized with N HCl, concentrated

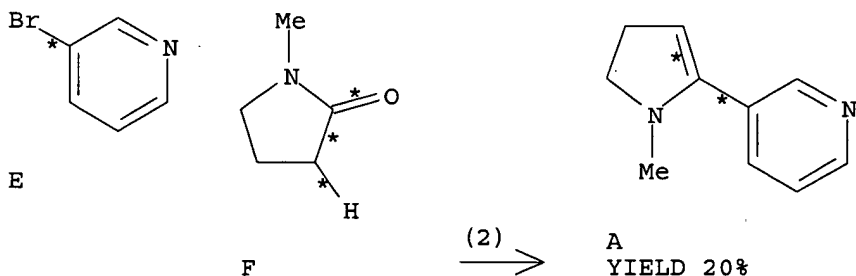
in vacuo, the base liberated with aqueous NaOH, extracted with Et2O, the extract

dried over solid KOH, and fractionated to give 1.5 g. N-methylmyosmine

(I), b2 87-8°; dipicrate m. 163.5-4.5° (EtOH). Heating 1 g.

I, 3 ml. 95% HCO2H, and 3 g. fused HCO2K at 160-70° 5 hrs., diluting the cooled mixture with H2O, steam-distilling, and working up the distillate as above gave 0.67 dl-nicotine, b14 118-19°; dipicrate m. 221° (EtOH-H2O).

RX(2) OF 3 E + F ==> A...



RX(2) RCT E 626-55-1, F 872-50-4  
RGT G 7439-93-2 Li, H 124-38-9 CO2  
PRO A 525-74-6  
SOL 60-29-7 Et2O  
NTE Classification: C-Arylation; Substitution; # Conditions: BuLi  
BuCl Li CO2; /N2 Et2O 4h

=&gt; =&gt; d his

(FILE 'HOME' ENTERED AT 11:48:43 ON 25 APR 2005)  
SET COST OFF

FILE 'REGISTRY' ENTERED AT 11:48:51 ON 25 APR 2005

E LI/MF  
L1 30 S E3

FILE 'CASREACT' ENTERED AT 11:49:00 ON 25 APR 2005

ACT ZINNA677/A

L2 STR

L3 5208 SEA FILE=CASREACT SSS FUL L2 ( 62854 REACTIONS)

ACT ZINNA677A/A

L4 STR

L5 STR

L6 ( 5208)SEA FILE=CASREACT SSS FUL L4 ( 62854 REACTIONS)

L7 2389 SEA FILE=CASREACT SUB=L6 SSS FUL L5 ( 24843 REACTIONS)

L8 32 S L1 AND L7

L9 22 S L8 AND (PY&lt;=2001 OR PRY&lt;=2001 OR AY&lt;=2001)

L10 1 S L8 AND (MEUDT ? OR ERBES ? OR FORSTINGER ?)/AU

L11 1 S L8 AND CLARIANT?/PA,CS

L12 10 S L8 NOT L9-L11

L13 22 S L9-L11

FILE 'CASREACT' ENTERED AT 11:55:12 ON 25 APR 2005

L14 427 S L7 AND ?CYAN?

E CYANATE/CW

L15 22 S L7 AND E4,E5

E CYANATE/CT

L16 22 S L7 AND E4-E7

L17 4 S L14-L16 AND L8

=&gt; d bib tot l17

L17 ANSWER 1 OF 4 CASREACT COPYRIGHT 2005 ACS on STN

AN 138:73075 CASREACT

TI Process for the preparation of substituted aromatics via lithiation and  
electrophilic alkylation of haloaromatics

IN Meudt, Andreas; Erbes, Michael; Forstinger, Klaus

PA Clariant G.m.b.H., Germany

SO Eur. Pat. Appl., 11 pp.

CODEN: EPXXDW

DT Patent

LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1270535	A2	20030102	EP 2002-12763	20020608
	EP 1270535	A3	20040218		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
	DE 10155209	A1	20030109	DE 2001-10155209	20011109
	US 2003018192	A1	20030123	US 2002-171444	20020613
	US 6657093	B2	20031202		
	JP 2003073308	A2	20030312	JP 2002-180218	20020620
	US 2004073032	A1	20040415	US 2003-677412	20031002
PRAI	DE 2001-10129765		20010620		



DE 2001-10155209 20011109

US 2002-171444 20020613

OS MARPAT 138:73075

L17 ANSWER 2 OF 4 CASREACT COPYRIGHT 2005 ACS on STN

AN 131:336801 CASREACT

TI Application of Stille coupling to the preparation of arylated  
phthalonitriles and **phthalocyanines**

AU Aranyos, Viviane; Castano, Ana M.; Grennberg, Helena

CS Department of Organic Chemistry, Uppsala University, Uppsala, 751 21,  
Swed.

SO Acta Chemica Scandinavica (1999), 53(9), 714-720

CODEN: ACHSE7; ISSN: 0904-213X

PB Munksgaard International Publishers Ltd.

DT Journal

LA English

RE.CNT 47 THERE ARE 47 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 3 OF 4 CASREACT COPYRIGHT 2005 ACS on STN

AN 124:289060 CASREACT

TI Total Synthesis of (-)-Virginiamycin M2 Using Second-Generation Vinylogous  
Urethane Chemistry

AU Schlessinger, R. H.; Li, Yu-Jang

CS Department of Chemistry, University of Rochester, Rochester, NY, 14627,  
USA

SO Journal of the American Chemical Society (1996), 118(13), 3301-2

CODEN: JACSAT; ISSN: 0002-7863

PB American Chemical Society

DT Journal

LA English

L17 ANSWER 4 OF 4 CASREACT COPYRIGHT 2005 ACS on STN

AN 107:39971 CASREACT

TI Synthesis of the tridentate pyridine donor 2,6-bis[1-phenyl-1-(2-  
pyridyl)ethyl]pyridine (L), including separation of meso and rac  
diastereoisomers via methylmercury(II) derivatives, and an x-ray  
structural study of meso-[2,6-bis[1-phenyl-1-(2-pyridyl)ethyl]pyridine-  
N,N',N'']methylmercury(II) nitrate dihydrate

AU Canty, Allan J.; Minchin, Nigel J.; Skelton, Brian W.; White, Allan H.

CS Chem. Dep., Univ. Tasmania, Hobart, 7001, Australia

SO Journal of the Chemical Society, Dalton Transactions: Inorganic Chemistry  
(1972-1999) (1986), (10), 2201-4

CODEN: JCDBTI; ISSN: 0300-9246

DT Journal

LA English

=&gt;